05 - STRUCTURES
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BSM-1 TO BSM-6	BREAKAWAY SIGN SUPPORTS		

DESIGNED BY:

DE CARLO & DOLL, INC.
89 COLONY STREET
MERIDEN, CONNECTICUT 06451

Doron Dagan
2014.06.13
15:09:25-04'00'

REV.	DATE	REVISION DESCRIPTION	SHEET NO.
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THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.

Plotted Date: 6/13/2014

DESIGNER/DRAFTER: **R.H.S./D.A.S.**
CHECKED BY: **J.A.G.**

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: ...\Wall 101\HW_MSH_Subset05.dgn

SIGNATURE/ BLOCK:

DESIGNED BY:
LUCHS CONSULTING ENGINEERS, LLC
89 COLONY STREET
MERIDEN, CT 06451

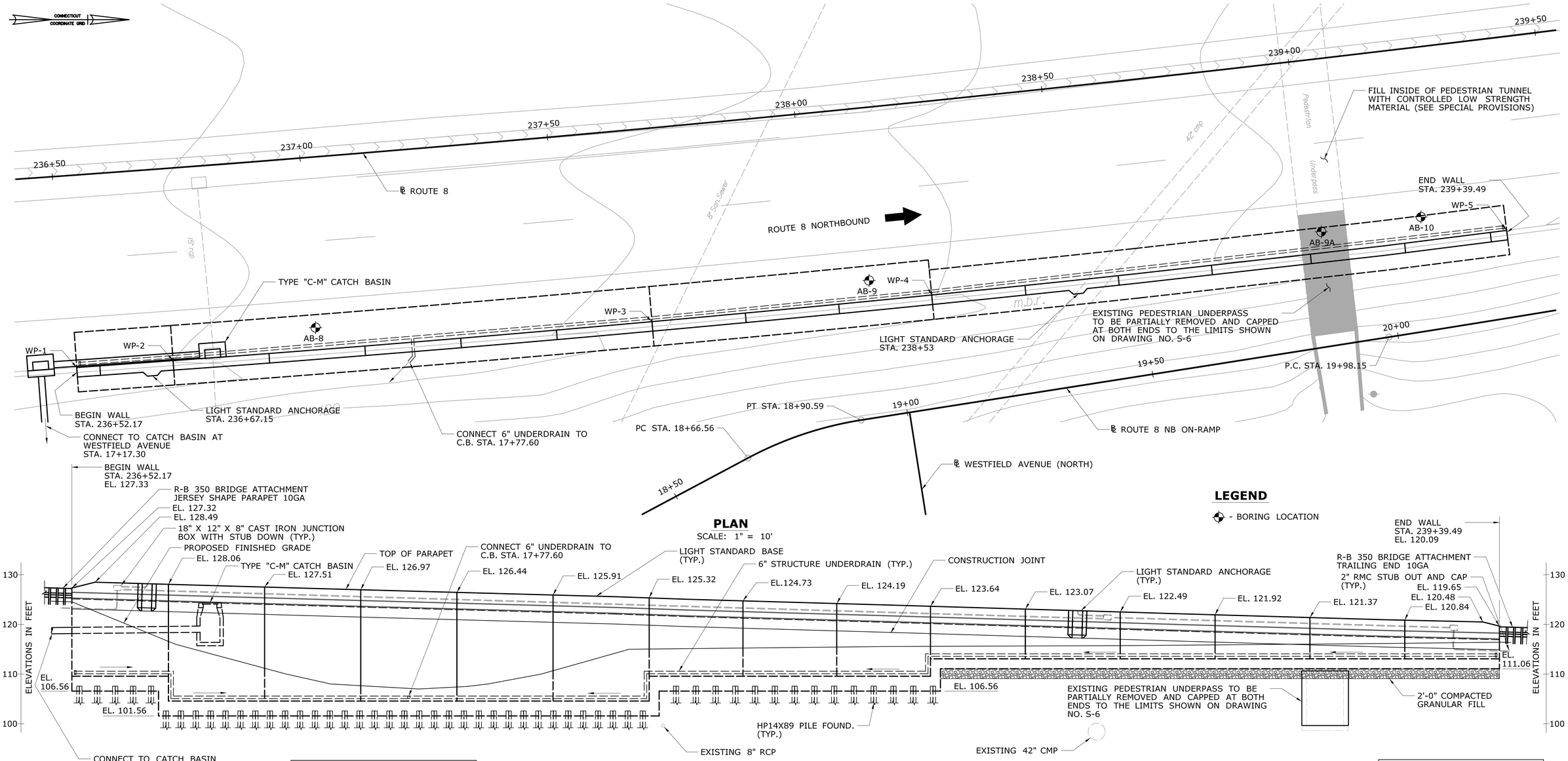
PROJECT TITLE:
ROUTE 8
INTERCHANGE 18
NEW NORTHBOUND ON-RAMP

TOWN: **ANSONIA AND DERBY**

DRAWING TITLE: **SUBSET 05 COVER SHEET**

PROJECT NO. **36-179**
DRAWING NO. **S-00**
SHEET NO. **05.01**

Connecticut Department of Transportation
QA/QC Format Check



ELEVATION
SCALE: 1" = 10'

CONCRETE DISTRIBUTION	
SUPERSTRUCTURE	-
SUBSTRUCTURE	390 C.Y.
FOOTINGS	340 C.Y.
TOTAL	730 C.Y.

INSPECTION OF FIELD WELDS		
METHOD	UNIT	QUANTITY
ULTRASONIC	IN	0
MAGNETIC PARTICLE	FT	0

WORKING POINT COORDINATES		
DESCRIPTION	NORTHING	EASTING
WP-1	685168.6918	906017.2049
WP-2	685188.0897	906015.8111
WP-3	685284.5133	906007.9679
WP-4	685340.8364	906002.6056
WP-5	685456.5968	905989.5951

TRANSPORTATION DIMENSIONS AND WEIGHT			
MEMBER	SHIPPING LENGTH	SHIPPING HEIGHT	SHIPPING WEIGHT
PILES	60 FEET		5,500 LB

NOTICE TO BRIDGE INSPECTORS

THE DEPARTMENT'S BRIDGE SAFETY PROCEDURES REQUIRE THIS BRIDGE TO BE INSPECTED FOR, BUT NOT LIMITED TO, ALL APPROPRIATE COMPONENTS INDICATED IN THE GOVERNING MANUALS FOR BRIDGE INSPECTION. ATTENTION MUST BE GIVEN TO INSPECTING THE FOLLOWING SPECIAL COMPONENTS AND DETAILS. (THE LISTING OF COMPONENTS FOR SPECIFIC ATTENTION SHALL NOT BE CONSTRUED TO REDUCE THE IMPORTANCE OF INSPECTION OF ANY OTHER COMPONENT OF THE STRUCTURE). THE FREQUENCY OF INSPECTION OF THIS STRUCTURE SHALL BE IN ACCORDANCE WITH THE GOVERNING MANUALS FOR BRIDGE INSPECTION, UNLESS OTHERWISE DIRECTED BY THE MANAGER OF BRIDGE SAFETY AND EVALUATION.

COMPONENTS OR DETAILS	BRIDGE SHEET REFERENCE
NONE	NONE

ROUTE 8 CURVE DATA	
DELTA	13° 16' 40"
R	5729.58
L	1327.78
T	666.88
P.C. STA.	233+29.21
P.T. STA.	246+56.99

LEGEND:

- LIMITS OF REMOVAL OF PEDESTRIAN TUNNEL TO BE PAID FOR UNDER THE ITEM "REMOVAL OF EXISTING MASONRY"

REV.	DATE	REVISION DESCRIPTION	SHEET NO.
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Plotted Date: 5/5/2014

DESIGNER/DRAFTER: R.H.S./D.A.S.
CHECKED BY: J.A.G.
SCALE AS NOTED

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: ...\SB_MST_036_179_GPN.dgn

SIGNATURE/ BLOCK:

DESIGNED BY:
LUCHS CONSULTING ENGINEERS, LLC
89 COLONY STREET
MERIDEN, CT 06451

PROJECT TITLE:
ROUTE 8
INTERCHANGE 18
NEW NORTHBOUND ON-RAMP

TOWN: ANSONIA/DERBY

DRAWING TITLE:
WALL 101 GENERAL PLAN AND ELEVATION

PROJECT NO. 36-179
DRAWING NO. S-1
SHEET NO. 05.02

QUANTITIES

ITEM	UNIT	QUANTITY
STRUCTURE EXCAVATION - EARTH (COMPLETE)	C.Y.	2600
COMPACTED GRANULAR FILL	C.Y.	150
PERVIOUS STRUCTURE BACKFILL	C.Y.	1100
CONTROLLED LOW STRENGTH MATERIAL	C.Y.	250
CLASS "A" CONCRETE	C.Y.	650
CLASS "F" CONCRETE	C.Y.	80
$\frac{1}{2}$" PREFORMED EXPANSION JOINT FILLER FOR BRIDGES	S.F.	150
DEFORMED STEEL BARS	LBS.	65100
DEFORMED STEEL BARS - EPOXY COATED	LBS.	13500
FURNISHING STEEL PILES	LBS.	280000
DRIVING STEEL PILES	L.F.	3100
POINT REINFORCEMENT FOR STEEL PILES	EA.	79
TEST PILE (STEEL HP14X89 - 50' LONG)	EA.	2
DYNAMIC PILE DRIVING ANALYSIS (P.D.A) TEST	EA.	2
DAMPPROOFING	S.Y.	330
TEMPORARY EARTH RETAINING SYSTEM	S.F.	5800
6" STRUCTURE UNDERDRAIN	L.F.	300
REMOVAL OF EXISTING MASONRY	C.Y.	70
2" RIGID METAL CONDUIT IN STRUCTURE	L.F.	315
18"X12"X8" CAST IRON JUNCTION BOX	EA.	3

GENERAL NOTES

SPECIFICATIONS: CONNECTICUT DEPARTMENT OF TRANSPORTATION FORM 816 (2004), SUPPLEMENTAL SPECIFICATIONS DATED JANUARY 2014 AND SPECIAL PROVISIONS.

DESIGN SPECIFICATIONS: AASHTO LRFD BRIDGE DESIGN SPEIFICATIONS - 6TH EDITION, 2012 WITH INTERIM SPECIFICATIONS INCLUDING AND UP TO 2013, AND AS SUPPLEMENTED BY THE CONNECTICUT DEPARTMENT OF TRANSPORTATION BRIDGE DESIGN MANUAL (2003).

ALLOWABLE DESIGN STRESSES:

CLASS "A" CONCRETE	BASED ON f'c = 3300 PSI
CLASS "F" CONCRETE	BASED ON f'c = 4400 PSI
REINFORCEMENT (ASTM A615 GRADE 60)	fy = 60 KSI
STEEL PILES (ASTM A572, GRADE 50)	Fy = 50 KSI, FOR HP PILES

LIVE LOAD: AASHTO HL-93 LOADING

DIMENSIONS: ALL DIMENSIONS SHOWN ON THE PLANS ARE IN FEET AND INCHES UNLESS OTHERWISE NOTED. ALL ELEVATIONS ARE GIVEN IN FEET. WHEN ELEVATIONS ARE GIVEN TO LESS THAN THREE DECIMAL PLACES, THE OMITTED DIGITS SHALL BE ASSUMED TO BE ZERO.

EXISTING DIMENSIONS: THE CONTRACTOR SHALL TAKE ALL FIELD MEASUREMENTS NECESSARY TO ASSURE PROPER FIT OF THE FINISHED WORK AND SHALL ASSUME FULL RESPONSIBILITY FOR THEIR ACCURACY. WHEN SHOP DRAWINGS BASED ON FIELD MEASUREMENTS ARE SUBMITTED FOR APPROVAL, THE FIELD MEASUREMENTS SHALL ALSO BE SUBMITTED FOR REFERENCE BY THE REVIEWER.

EXISTING UTILITIES: THE CONTRACTOR SHALL FIELD VERIFY THE LOCATIONS AND INVERT ELEVATIONS FOR ALL EXISTING UTILITIES WITHIN THE LIMITS OF CONSTRUCTION.

CONCRETE NOTES

REMAIN-IN-PLACE FORMS: THE USE OF REMAIN-IN-PLACE FORMS ON THIS STRUCTURE ARE NOT ALLOWED.

CLASS "F" CONCRETE: CLASS "F" CONCRETE SHALL BE USED FOR THE PARAPET AND END BLOCKS.

CLASS "A" CONCRETE: CLASS "A" CONCRETE SHALL BE USED FOR THE RETAINING WALL.

JOINT SEAL: SEE SPECIAL PROVISIONS.

EXPOSED EDGES: EXPOSED EDGES OF CONCRETE SHALL BE BEVELED 1" x 1" UNLESS DIMENSIONED OTHERWISE.

CONCRETE COVER: ALL REINFORCEMENT SHALL HAVE TWO INCHES COVER UNLESS DIMENSIONED OTHERWISE.

REINFORCEMENT: ALL REINFORCEMENT SHALL BE ASTM A615 GRADE 60.

EPOXY COATED REINFORCING BARS: ALL REINFORCEMENT IN THE PARAPET AND END BLOCKS SHALL BE EPOXY COATED, UNLESS OTHERWISE NOTED. THESE BARS SHALL BE INCLUDED IN THE PAY ITEM "DEFORMED STEEL BARS (EPOXY COATED)".

PREFORMED EXPANSION JOINT FILLER: THE PREFORMED EXPANSION JOINT FILLER WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE FOOT UNDER THE ITEM "$\frac{1}{2}$ PREFORMED EXPANSION JOINT FILLER FOR BRIDGE" COMPLETE IN PLACE, WHICH PRICE SHALL INCLUDE ALL MATERIALS, EQUIPMENTS, TOOLS, LABOR AND WORK INCIDENTAL THERETO.

CONSTRUCTION JOINTS: CONSTRUCTION JOINTS, OTHER THAN THOSE SHOWN ON THE PLANS, WILL NOT BE PERMITTED WITHOUT THE PRIOR APPROVAL OF THE ENGINEER.

REV.	DATE	REVISION DESCRIPTION	SHEET NO.
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Plotted Date: 5/2/2014

DESIGNER/DRAFTER: R.H.S./D.A.S.
CHECKED BY: J.A.G.
SCALE AS NOTED

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: ...\SB_MST_036_179_GEN.dgn

SIGNATURE/ BLOCK:

DESIGNED BY:
LUCHS CONSULTING ENGINEERS, LLC
89 COLONY STREET
MERIDEN, CT 06451

PROJECT TITLE:
ROUTE 8
INTERCHANGE 18
NEW NORTHBOUND ON-RAMP

TOWN: ANSONIA AND DERBY

DRAWING TITLE:
WALL 101
GENERAL NOTES

PROJECT NO. 36-179
DRAWING NO. S-2
SHEET NO. 05.03

Driller: Jaime Lloret	**Connecticut DOT Boring Report**		Hole No.: AB-8
Inspector: R. Beniwal	Town: Ansonia		Stat./Offset: 17+88
Soil Engr: Applied Earth Tech.	Project No.: 36-176		Northing: 906009.17
Start Date: 08-07-12	Location: Route 8		Easting: 685216.78
Finish Date: 08-07-12	Bridge No.:		Surface Elevation: 123.72
Project Description: Route 8 Ramp 18 North			Prime Engineer: Luchs Consulting
Casing Size/Type: 3.25 in HA	Sampler Type/Size: SS 2.0 in		Core Barrel Type: NX diamond
Hammer Wt.: Fall:	Hammer Wt.: 140 lbs Fall: 30 in ROPE		Boring Co: Associate Borings CO.

Groundwater Observations: @Water at 24 feet

Depth (ft)	Sample Type/No.	Blows on Sampler per 6 inches	Pen. (in.)	Rec. (in.)	RQD %	Generalized Strata Description	Material Description and Notes	Elevation (ft)
0	S-1	19 28 70	18	6		ASPHALT & PROCESS BROWN FC SAND SOME FC GRAVEL, FILL	11 in Asphalt over 3 in process. Yellow brown fine coarse SAND, some fine coarse gravel, trace to little silt, fill.	120
5	S-2	23 19 10 11	24	10			Yellow brown fine coarse SAND, some fine coarse gravel, trace to little silt, fill. Gray brown fine coarse SAND, little fine coarse gravel, little silt, fill.	115
10	S-3	7 11 12 15	24	6		GRAY BROWN FC SAND LTL FC GRAVEL LTL SILT	Gray brown fine coarse SAND, little fine coarse gravel, little silt, fill.	110
15	S-4	10 8 11 14	24	1			Gray brown fine coarse SAND, little fine coarse gravel, little silt, fill.	105
20	S-5	100/5"	5	0		BROWN FC SAND SOME FC GRAVEL	Brown fine coarse SAND, some fine coarse gravel,little silt, occasional cobbles and boulders.	100
25	S-6	14 14 17 13	24	6			Brown fine coarse SAND, some fine coarse gravel,little silt, occasional cobbles and boulders.	95
30	S-7	16 56 100	18	8			Brown fine coarse SAND, some fine coarse gravel,little silt, occasional cobbles and boulders.	90
35	S-8	100/6"	6	3			Brown fine coarse SAND, some fine coarse gravel,little silt, occasional cobbles and boulders.	85
40								

Sample Type: S = Split Spoon C = Core UP = Undisturbed Piston V = Vane Shear Test
Proportions Used: Trace = 1 - 10%, Little = 10 - 20%, Some = 20 - 35%, And = 35 - 50%

Total Penetration in Earth: 49ft Rock: 0ft	NOTES: CME 55 Truck Mounted Rig was used.	Sheet 1 of 2
No. of Soil Samples: 9 No. of Core Runs: 0		SM-001-AETrev.9/09

Driller: Jaime Lloret	**Connecticut DOT Boring Report**		Hole No.: AB-8
Inspector: R. Beniwal	Town: Ansonia		Stat./Offset: 17+88
Soil Engr: Applied Earth Tech.	Project No.: 36-176		Northing: 906009.17
Start Date: 08-07-12	Location: Route 8		Easting: 685216.78
Finish Date: 08-07-12	Bridge No.:		Surface Elevation: 123.72
Project Description: Route 8 Ramp 18 North			Prime Engineer: Luchs Consulting
Casing Size/Type: 3.25 in HA	Sampler Type/Size: SS 2.0 in		Core Barrel Type: NX diamond
Hammer Wt.: Fall:	Hammer Wt.: 140 lbs Fall: 30 in ROPE		Boring Co: Associate Borings CO.

Groundwater Observations: @Water at 24 feet

Depth (ft)	Sample Type/No.	Blows on Sampler per 6 inches	Pen. (in.)	Rec. (in.)	RQD %	Generalized Strata Description	Material Description and Notes	Elevation (ft)
40	S-9	15 25 49 33	24	12		BROWN FC SAND SOME FC GRAVEL *(con't)*	Brown fine coarse SAND, some fine coarse gravel,little silt, occasional cobbles and boulders. Cored large boulder at 43.5 feet. Washed ahead to 49 feet. Core barrel stuck at 49 feet.	80
45								75
50							END OF BORING 49ft	70
55								65
60								60
65								55
70								50
75								45
80								

Sample Type: S = Split Spoon C = Core UP = Undisturbed Piston V = Vane Shear Test
Proportions Used: Trace = 1 - 10%, Little = 10 - 20%, Some = 20 - 35%, And = 35 - 50%

Total Penetration in Earth: 49ft Rock: 0ft	NOTES: CME 55 Truck Mounted Rig was used.	Sheet 2 of 2
No. of Soil Samples: 9 No. of Core Runs: 0		SM-001-AETrev.9/09

Driller: Jaime Lloret	**Connecticut DOT Boring Report**		Hole No.: AB-9
Inspector: R. Beniwal	Town: Ansonia		Stat./Offset: 18+97
Soil Engr: Applied Earth Tech.	Project No.: 36-176		Northing: 905999.68
Start Date: 08-06-12	Location: Route 8		Easting: 685328.23
Finish Date: 08-06-12	Bridge No.:		Surface Elevation: 120.4
Project Description: Route 8 Ramp 18 North			Prime Engineer: Luchs Consulting
Casing Size/Type: 3.25 in HA	Sampler Type/Size: SS 2.0 in		Core Barrel Type: NX diamond
Hammer Wt.: Fall:	Hammer Wt.: 140 lbs Fall: 30 in ROPE		Boring Co: Associate Borings CO.

Groundwater Observations: @Water at 21 feet

Depth (ft)	Sample Type/No.	Blows on Sampler per 6 inches	Pen. (in.)	Rec. (in.)	RQD %	Generalized Strata Description	Material Description and Notes	Elevation (ft)
0	S-1	13 29 37 39	24	10		ASPHALT & PROCESS BROWN FC GRAVEL & FC SAND, FILL	4 in Asphalt over 10 in process. Brown fine coarse GRAVEL and fine coarse sand, trace silt, occasional cobbles, fill.	120
5	S-2	15 17 13 53	24	2			Brown fine coarse GRAVEL and fine coarse sand, trace silt, occasional cobbles, fill.	115
10	S-3	100/2"	2	0			Brown fine coarse GRAVEL and fine coarse sand, trace silt, occasional cobbles and boulders, fill.	110
15	S-4	4 7 10 4	24	4		BROWN FC SAND SOME FM GRAVEL SOME SILT, FILL?	Brown fine coarse SAND, some fine medium gravel, some silt, fill?	105
20	S-5	1 1 1 1	24	8		BROWN F SAND SOME SILT	Brown fine coarse SAND, some fine medium gravel, some silt, fill? Brown fine SAND, some silt, occasional organic fine SAND and silt lenses.	100
25	S-6	5 7 16 19	24	12			Brown fine SAND, some silt, occasional organic fine SAND and silt lenses and laminations.	95
30	S-7	6 11 14 20	24	14		GRAY BROWN FC SAND LTL F GRAVEL LTL SILT	Brown fine SAND, some silt, laminations. Gray brown fine coarse SAND, little fine gravel, little silt	90
35	S-8	22 42 52 63	24	20			Gray brown fine coarse SAND, little fine gravel, little silt	85
40								

Sample Type: S = Split Spoon C = Core UP = Undisturbed Piston V = Vane Shear Test
Proportions Used: Trace = 1 - 10%, Little = 10 - 20%, Some = 20 - 35%, And = 35 - 50%

Total Penetration in Earth: 57.5ft Rock: 5ft	NOTES: CME 55 Truck Mounted Rig was used.	Sheet 1 of 2
No. of Soil Samples: 8 No. of Core Runs: 1		SM-001-AETrev.9/09

REV.	DATE	REVISION DESCRIPTION	SHEET NO.
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Plotted Date: 4/25/2014

DESIGNER/DRAFTER: R.H.S./D.A.S.
CHECKED BY: J.A.G.
SCALE AS NOTED

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: ...\SB_MST_036_179_BR1.dgn

SIGNATURE/ BLOCK:

DESIGNED BY:
LUCHS CONSULTING ENGINEERS, LLC
89 COLONY STREET
MERIDEN, CT 06451

PROJECT TITLE:
ROUTE 8
INTERCHANGE 18
NEW NORTHBOUND ON-RAMP

TOWN: ANSONIA AND DERBY

DRAWING TITLE:
WALL 101
BORING LOGS - 1

PROJECT NO. 36-179
DRAWING NO. S-3
SHEET NO. 05.04

Driller: Jaime Lloret	**Connecticut DOT Boring Report**	Hole No.: AB-9
Inspector: R. Beniwal	Town: Ansonia	Stat./Offset: 18+97
Soil Engr: Applied Earth Tech.	Project No.: 36-176	Northing: 905999.68
Start Date: 08-06-12	Location: Route 8	Easting: 685328.23
Finish Date: 08-06-12	Bridge No.:	Surface Elevation: 120.4
Project Description: Route 8 Ramp 18 North		Prime Engineer: Luchs Consulting
Casing Size/Type: 3.25 in HA	Sampler Type/Size: SS 2.0 in	Core Barrel Type: NX diamond
Hammer Wt.: Fall:	Hammer Wt.: 140 lbs Fall: 30 in ROPE	Boring Co: Associate Borings CO.

Groundwater Observations: @Water at 21 feet

Depth (ft)	Sample Type/No.	Blows on Sampler per 6 inches	Pen. (in.)	Rec. (in.)	RQD %	Generalized Strata Description	Material Description and Notes	Elevation (ft)
40	S-9	60 100/3"	9	4		GRAY BROWN FC SAND LTL F GRAVEL LTL SILT *(con't)*	Gray brown fine coarse SAND, little fine gravel, little silt, occasional cobbles and boulders.	80
45	S-10	25 62 50/1"	13	8			Gray brown fine coarse SAND, little fine gravel, little silt, occasional cobbles and boulders.	75
50	C-1		58	6			Gray brown fine coarse SAND, little fine gravel, little silt, cobbles and boulders.	70
						GRAY SCHIST		
55	C-2		60	26	6		Gray, slightly weathered, medium grained SCHIST.	65
60							END OF BORING 57.5ft	60
65								55
70								50
75								45
80								

Sample Type: S = Split Spoon C = Core UP = Undisturbed Piston V = Vane Shear Test
Proportions Used: Trace = 1 - 10%, Little = 10 - 20%, Some = 20 - 35%, And = 35 - 50%

Total Penetration in	NOTES: CME 55 Truck Mounted Rig was used.	Sheet
Earth: 57.5ft Rock: 5ft		2 of 2
No. of Soil Samples: 8 No. of Core Runs: 1		SM-001-AETrev.9/09

Applied Earth Technologies, Inc., 571 Bee Street, Meriden, CT 06450, Tel: 203-634-9110 A-12

Driller: Jaime Lloret	**Connecticut DOT Boring Report**	Hole No.: AB-9A
Inspector: R. Beniwal	Town: Ansonia	Stat./Offset: 19+88
Soil Engr: Applied Earth Tech.	Project No.: 36-176	Northing: 905989.89
Start Date: 08-06-12	Location: Route 8	Easting: 685419.29
Finish Date: 08-06-12	Bridge No.:	Surface Elevation: 117.76
Project Description: Route 8 Ramp 18 North		Prime Engineer: Luchs Consulting
Casing Size/Type: 3.25 in HA	Sampler Type/Size: SS 2.0 in	Core Barrel Type:
Hammer Wt.: Fall:	Hammer Wt.: 140 lbs Fall: 30 in ROPE	Boring Co: Associate Borings CO.

Groundwater Observations: @No water

Depth (ft)	Sample Type/No.	Blows on Sampler per 6 inches	Pen. (in.)	Rec. (in.)	RQD %	Generalized Strata Description	Material Description and Notes	Elevation (ft)
0						ASPHAL & PROCESS	4 in asphalt over 10" process.	
						BROWN FC GRAVEL & FC SAND	Brown fine coarse gravel, and fine coarse Sand, boulders and cobbles, fill.	115
5	C-1		3	3		CONCRETE	Reinforced cement concrete.	
10							END OF BORING 7ft	110
15								105
20								100

Sample Type: S = Split Spoon C = Core UP = Undisturbed Piston V = Vane Shear Test
Proportions Used: Trace = 1 - 10%, Little = 10 - 20%, Some = 20 - 35%, And = 35 - 50%

Total Penetration in	NOTES: CME 55 Truck Mounted Rig was used.	Sheet
Earth: 6.75ft Rock: 0.25ft		1 of 1
No. of Soil Samples: 0 No. of Core Runs: 0		SM-001-AETrev.9/09

Applied Earth Technologies, Inc., 571 Bee Street, Meriden, CT 06450, Tel: 203-634-9110 A-13

Driller: Jaime Lloret	**Connecticut DOT Boring Report**	Hole No.: AB-10
Inspector: R. Beniwal	Town: Ansonia	Stat./Offset: 20+00
Soil Engr: Applied Earth Tech.	Project No.: 36-176	Northing: 905988.89
Start Date: 08-06-12	Location: Route 8	Easting: 685439.34
Finish Date: 08-06-12	Bridge No.:	Surface Elevation: 117.22
Project Description: Route 8 Ramp 18 North		Prime Engineer: Luchs Consulting
Casing Size/Type: 3.25 in HA	Sampler Type/Size: SS 2.0 in	Core Barrel Type: NX diamond
Hammer Wt.: Fall:	Hammer Wt.: 140 lbs Fall: 30 in ROPE	Boring Co: Associate Borings CO.

Groundwater Observations: @Water at 20 feet

Depth (ft)	Sample Type/No.	Blows on Sampler per 6 inches	Pen. (in.)	Rec. (in.)	RQD %	Generalized Strata Description	Material Description and Notes	Elevation (ft)
0						ASPHALT & PROCESS	4 in Asphalt over 10 in process.	
	S-1	50 63 51	18	10		GRAY BROWN FC SAND, LTL FC GRAVEL, LTL SILT, FILL	Brown fine coarse GRAVEL and fine coarse sand, trace silt, fill.	115
5	S-2	9 10 23 15	24	4			Gray brown fine coarse SAND, little coarse fine gravel, little silt, occasional cobbles, fill.	
							Gray brown fine coarse SAND, little coarse fine gravel, little silt, occasional cobbles, fill.	110
10	S-3	5 10 13 17	24	3			Gray brown fine coarse SAND, little coarse fine gravel, little silt, occasional cobbles, fill.	105
15	S-4	12 18 26 18	24	3			Gray brown fine coarse SAND, little coarse fine gravel, little silt, occasional cobbles, fill.	100
20	S-5	24 4 4 6	24	0		BROWN ORGANIC F SAND & SILT	Dark brown organice fine sand, and silt.	95
25	S-6	4 8 19 25	24	14		BROWN F SAND & SILT	Dark brown fine sand, and silt, laminations.	90
30	S-7	7 28 38 58	24	14		BROWN FC GRAVEL & FC SAND	Dark brown fine sand, and silt, laminations. Brown fine coarse GRAVEL, and fine coarse sand, trace silt.	85
35	S-8	34 55 14 14	24	4			Brown fine coarse GRAVEL, and fine coarse sand, trace silt.	80
40								

Sample Type: S = Split Spoon C = Core UP = Undisturbed Piston V = Vane Shear Test
Proportions Used: Trace = 1 - 10%, Little = 10 - 20%, Some = 20 - 35%, And = 35 - 50%

Total Penetration in	NOTES: CME 55 Truck Mounted Rig was used.	Sheet
Earth: 55ft Rock: 5ft		1 of 2
No. of Soil Samples: 9 No. of Core Runs: 1		SM-001-AETrev.9/09

Applied Earth Technologies, Inc., 571 Bee Street, Meriden, CT 06450, Tel: 203-634-9110 A-14

REV.	DATE	REVISION DESCRIPTION	SHEET NO.
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Plotted Date: 4/25/2014

DESIGNER/DRAFTER: R.H.S./D.A.S.
CHECKED BY: J.A.G.
SCALE AS NOTED

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: ...\SB_MST_036_179_BR2.dgn

SIGNATURE/ BLOCK:

DESIGNED BY:
LUCHS CONSULTING ENGINEERS, LLC
89 COLONY STREET
MERIDEN, CT 06451

PROJECT TITLE:
ROUTE 8
INTERCHANGE 18
NEW NORTHBOUND ON-RAMP

TOWN: ANSONIA AND DERBY

DRAWING TITLE: WALL 101 BORING LOGS - 2

PROJECT NO. 36-179
DRAWING NO. S-4
SHEET NO. 05.05

Driller: Jaime Lloret	**Connecticut DOT Boring Report**	Hole No.: AB-10
Inspector: R. Beniwal	Town: Ansonia	Stat./Offset: 20+00
Soil Engr: Applied Earth Tech.	Project No.: 36-176	Northing: 905986.89
Start Date: 08-06-12	Location: Route 8	Easting: 685439.34
Finish Date: 08-06-12	Bridge No.:	Surface Elevation: 117.22
Project Description: Route 8 Ramp 18 North		Prime Engineer: Luchs Consulting
Casing Size/Type: 3.25 in HA	Sampler Type/Size: SS 2.0 in	Core Barrel Type: NX diamond
Hammer Wt.: Fall:	Hammer Wt.: 140 lbs Fall: 30 in ROPE	Boring Co: Associate Borings CO.
Groundwater Observations: @Water at 20 feet		

Depth (ft)	SAMPLES: Sample Type/No.	Blows on Sampler per 6 inches	Pen. (in.)	Rec. (in.)	RQD %	Generalized Strata Description	Material Description and Notes	Elevation (ft)
40	S-9	45 33 44 100/3"	21	8		BROWN FC GRAVEL & FC SAND *(con't)*	Brown fine coarse GRAVEL, and fine coarse sand, trace silt.	75
45	S-10	14 55 80	18	9		HIGHLY WEATHERED BEDROCK	Highyl weathered/decomposed bedrock.	70
50	C-1		60	60	61	GRAY SCHIST	Gray slightly weathered, medium grained interlayered SCHIST and granofels.	65
55							END OF BORING 55ft	60
60								55
65								50
70								45
75								40
80								

Sample Type: S = Split Spoon C = Core UP = Undisturbed Piston V = Vane Shear Test

Proportions Used: Trace = 1 - 10%, Little = 10 - 20%, Some = 20 - 35%, And = 35 - 50%

Total Penetration in Earth: 55ft Rock: 5ft	NOTES: CME 55 Truck Mounted Rig was used.	Sheet 2 of 2
No. of Soil Samples: 9 No. of Core Runs: 1		SM-001-AETrev.9/09

Applied Earth Technologies, Inc., 671 Bee Street, Meriden, CT 06450, Tel: 203-634-9110 A-15

REV.	DATE	REVISION DESCRIPTION	SHEET NO.
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Plotted Date: 4/25/2014

DESIGNER/DRAFTER: **R.H.S./D.A.S.**

CHECKED BY: **J.A.G.**

SCALE AS NOTED

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: ...\SB..MST..036..179..BR3.dgn

SIGNATURE/ BLOCK:

DESIGNED BY:
LUCHS CONSULTING ENGINEERS, LLC
89 COLONY STREET
MERIDEN, CT 06451

PROJECT TITLE:
ROUTE 8
INTERCHANGE 18
NEW NORTHBOUND ON-RAMP

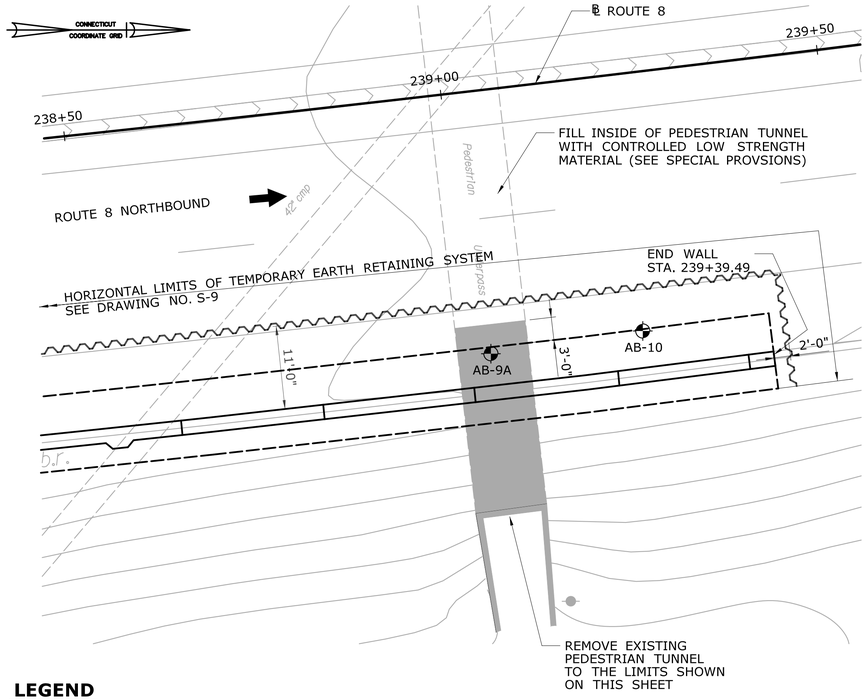
TOWN: **ANSONIA AND DERBY**

DRAWING TITLE: **WALL 101 BORING LOGS - 3**

PROJECT NO. **36-179**

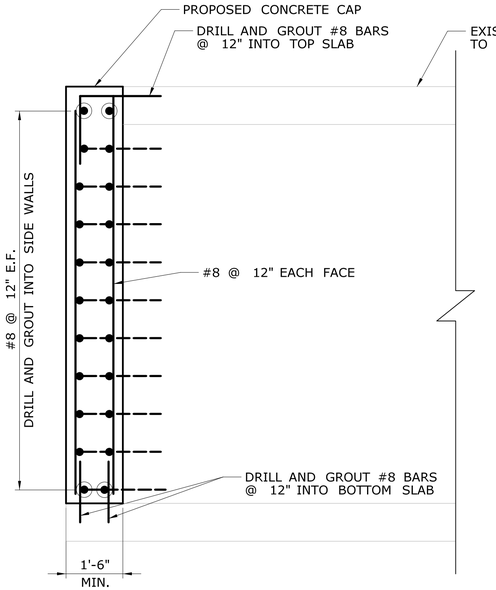
DRAWING NO. **S-5**

SHEET NO. **05.06**



PARTIAL PLAN VIEW

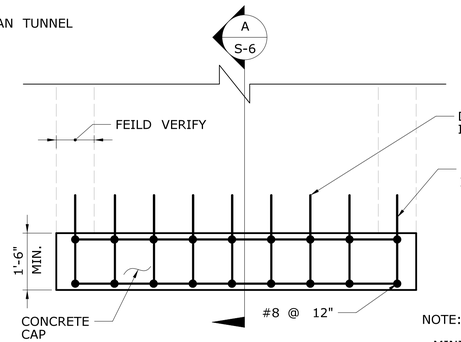
SCALE: 1" = 10'



SECTION A (LOOKING SOUTH)

SCALE: ½" = 1'-0"

EAST CONCRETE CAP SHOWN, WEST CONCRETE CAP SIMILAR



PLAN VIEW

PEDESTRIAN TUNNEL CAP

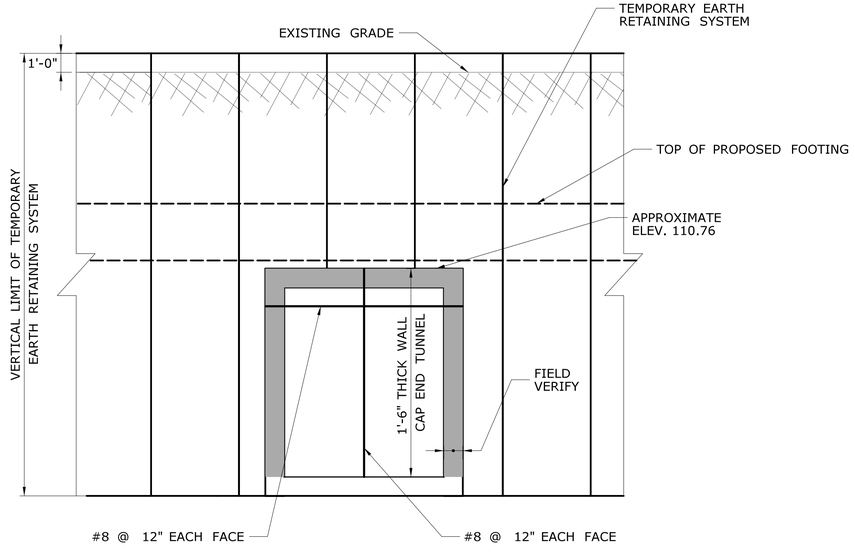
SCALE: ½" = 1'-0"

NOTE:

- MINIMUM EMBEDMENT REQUIRED FOR DRILLING AND GROUTING OF REINFORCEMENT SHALL BE PER MANUFACTURER RECOMMENDATIONS BUT NOT LESS THAN 8" EMBEDMENT

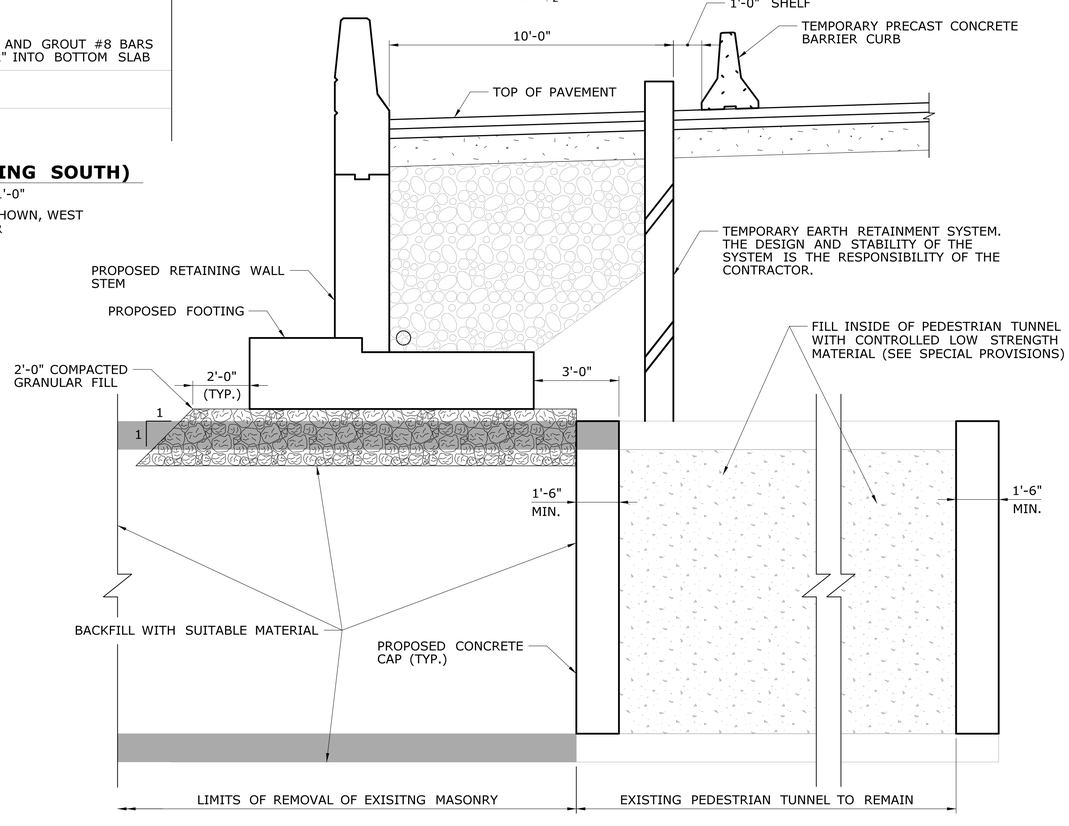
LEGEND

- BORING LOCATION



ELEVATION

SCALE: ¼" = 1'-0"



SECTION AT MIDDLE OF PEDESTRIAN TUNNEL

SCALE: ⅜" = 1'-0"

LEGEND:

- LIMITS OF REMOVAL OF PEDESTRIAN TUNNEL TO BE PAID FOR UNDER THE ITEM "REMOVAL OF EXISTING MASONRY"

- LIMITS OF PERVIOUS STRUCTURE BACKFILL

REV.	DATE	REVISION DESCRIPTION	SHEET NO.
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Plotted Date: 4/25/2014

DESIGNER/DRAFTER: R.H.S./D.A.S.

CHECKED BY: J.A.G.

SCALE AS NOTED

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DEPARTMENT OF TRANSPORTATION

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LUCHS CONSULTING ENGINEERS, LLC
89 COLONY STREET
MERIDEN, CT 06451

PROJECT TITLE:
ROUTE 8
INTERCHANGE 18
NEW NORTHBOUND ON-RAMP

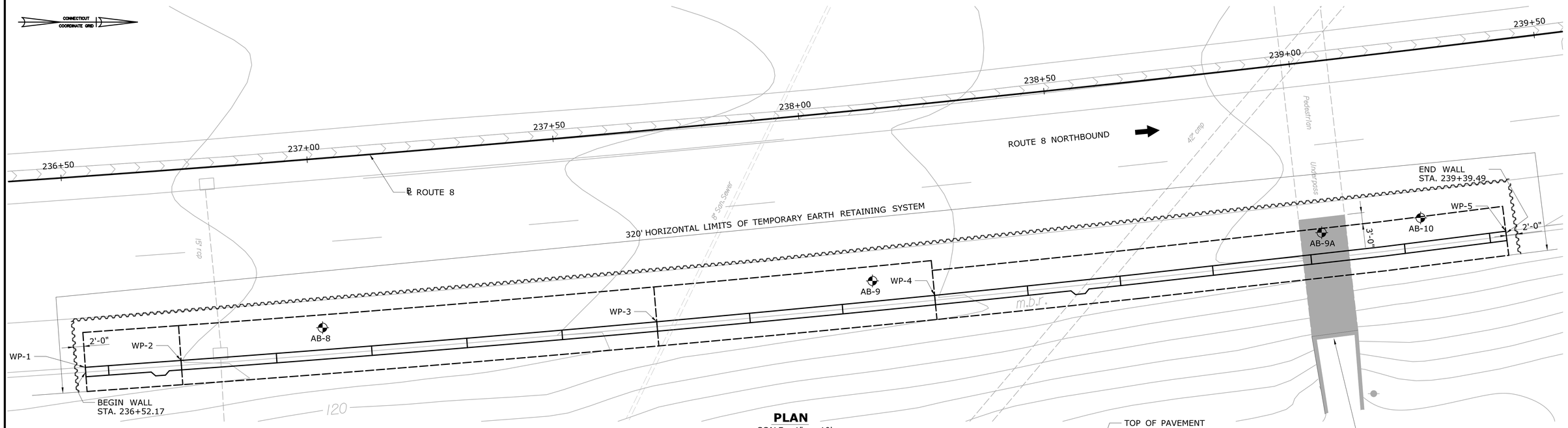
TOWN: **ANSONIA/DERBY**

DRAWING TITLE:
WALL 101
DEMOLITION PLAN

PROJECT NO. **36-179**

DRAWING NO. **S-6**

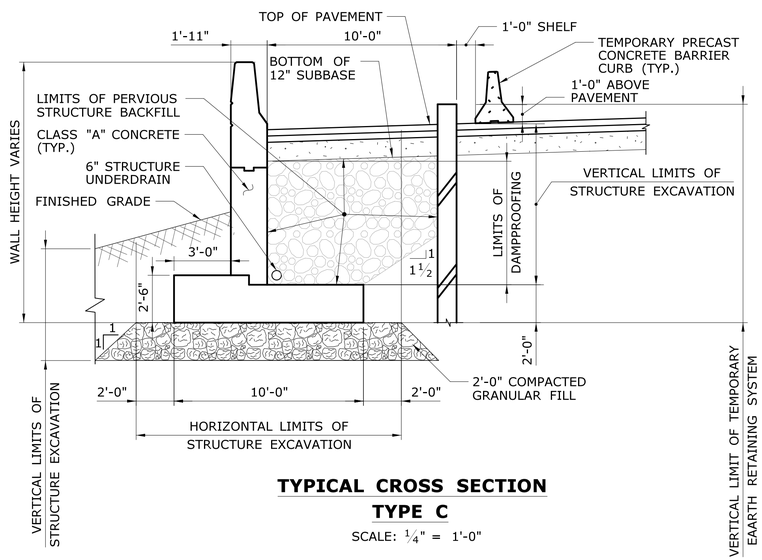
SHEET NO. **05.07**



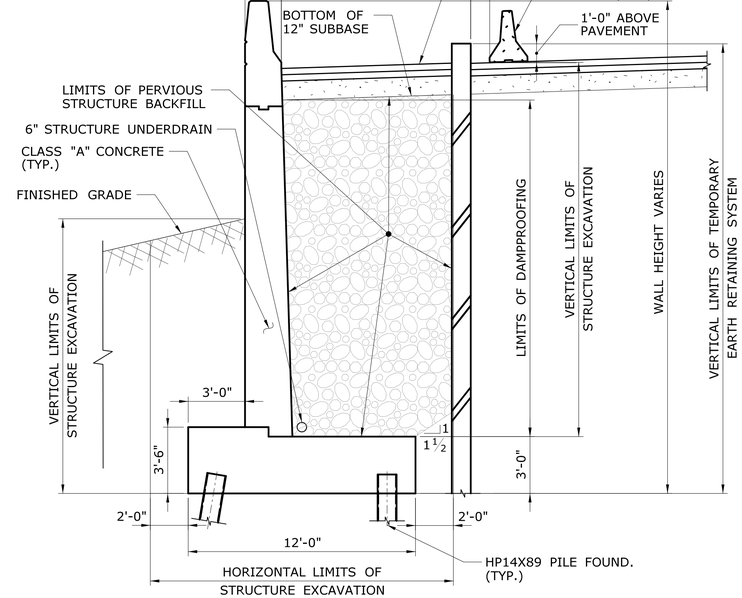
PLAN
SCALE: 1" = 10'

LEGEND

- BORING LOCATION



TYPICAL CROSS SECTION
TYPE C
SCALE: ¼" = 1'-0"



TYPICAL CROSS SECTION
TYPE A AND B
SCALE: ¼" = 1'-0"

LEGEND:

– LIMITS OF REMOVAL OF PEDESTRIAN TUNNEL TO BE PAID FOR UNDER THE ITEM "REMOVAL OF EXISTING MASONRY"

– LIMITS OF PERVIOUS STRUCTURE BACKFILL

REV.	DATE	REVISION DESCRIPTION	SHEET NO.
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Plotted Date: 4/3/2014

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CHECKED BY: **J.A.G.**
SCALE AS NOTED

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DEPARTMENT OF TRANSPORTATION

Filename: ..\SB_MST_036_179_PAY.dgn

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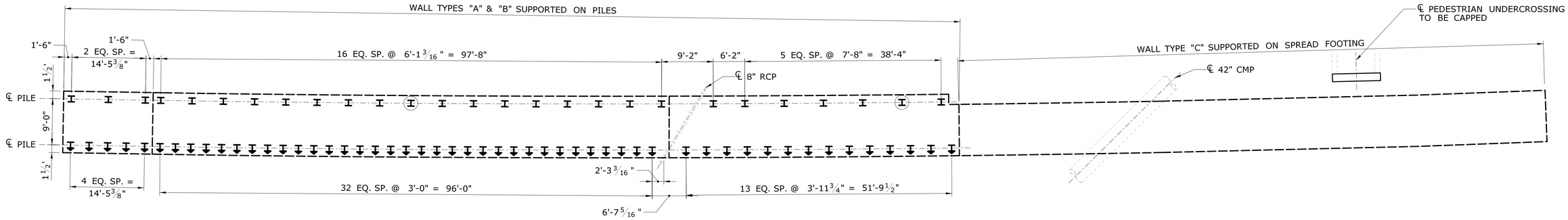
LUCHS CONSULTING ENGINEERS, LLC
89 COLONY STREET
MERIDEN, CT 06451

PROJECT TITLE:
ROUTE 8
INTERCHANGE 18
NEW NORTHBOUND ON-RAMP

TOWN: **ANSONIA/DERBY**

DRAWING TITLE: **WALL 101 PAY LIMITS**

PROJECT NO. **36-179**
DRAWING NO. **S-7**
SHEET NO. **05.08**



PLAN

SCALE: 1" = 10'

WALL TYPES A & B	
LIMIT STATE	MAXIMUM DESIGN PILE LOAD
SERVICE I	93 KIPS
STRENGTH I	115 KIPS

WALL TYPE C	
LIMIT STATE	MAXIMUM FOOTING PRESSURE
SERVICE I	1.6 KSF
STRENGTH I	2.0 KSF

LEGEND

I - DENOTES VERTICAL HP14X89 PILE

I - DENOTES BATTERED HP14X89 PILE

(I) - DENOTES HP14X89 TEST PILE

PILE NOTES

1. PILE FACTORED AXIAL REISTANCE = 270 KIPS, THE RESISTANCE FACTOR = 0.45
2. NOMINAL PILE CAPACITY = 600 KIPS
3. NOMINAL BEARING CAPACITY = 18 KSF
4. RESISTANCE FACTOR FOR SLIDING = 0.80, RESISTANCE FACTOR FOR BEARING CAPACITY = 0.45.
5. FACTORED BEARING CAPACITY = 8 KSF (WALL TYPE C).
6. HP14X89 PILES SHALL CONFORM TO ASTM A572, GRADE 50, Fy = 50 KSI.
7. ESTIMATED PILE LENGTH FOR RETAINING WALL 101, TYPE A = 40 FEET, TYPE B = 50 FEET.
8. PRIOR TO DRIVING THE PILES, THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER FOR REVIEW AND APPROVAL HIS METHOD AND SEQUENCE OF PILE DRIVING. ALL PILES SHALL BE END BEARING.
9. POINT REINFORCEMENT FOR HP14X89 PILES ARE TO BE INSTALLED. PREFABRICATED POINT REINFORCEMENT DEVICES SHALL BE USED IF APPROVED BY THE ENGINEER. THE PREFABRICATED POINT REINFORCEMENT SHALL BE ATTACHED TO THE HP14X89 PILES BY CONTINUOUS FILLET WELDS ALONG THE PERIMETER OF THE HP PILE. PILE POINTS FABRICATED FROM CAST STEEL (ASTM A27), OR APPROVED EQUAL, ARE RECOMMENDED FOR THEIR STRENGTH AND DURABILITY.
10. WELDING DETAILS SHALL CONFORM TO ANSI/AASHTO/AWS D1.5 (2010 EDITION) INCLUDING 2011 INTERIMS OF BRIDGE WELDING CODE.
11. THE CONTRACTOR SHALL SUBMIT ALL PROPRIETARY HP PILE POINT REINFORCEMENT FOR THE REVIEW AND APPROVAL BY THE ENGINEER.
12. CONFORMANCE TO THE FOLLOWING TOLERANCES IS OF EXTREME IMPORTANCE TO FOUNDATIONS OF THIS TYPE.
13. PRIOR TO PLACING, EACH HP PILE SHALL BE HELD BY TEMPLATE TO WITHIN 2" OF PLAN LOCATION.
14. AFTER EACH PILE IS IN PLACE, THE PILE'S TOP SHALL BE WITHIN 6" OF PLAN LOCATION.
15. THE ESTIMATED PILE LENGTH SHOULD NOT BE USED AS THE ORDER LENGTH. ORDER LENGTHS WILL BE DETERMINED UPON COMPLETION OF THE PDA TESTING AND REPORT.
16. DYNAMIC PILE MONITORING SHOULD BE PERFORMED ON THE TWO TEST PILES.
17. THE USE OF VIBRATORY HAMMERS FOR INSTALLATION OF ANY PORTION OF THE PILES WILL NOT BE PERMITTED.

REV.	DATE	REVISION DESCRIPTION	SHEET NO.
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Plotted Date: 5/1/2014

DESIGNER/DRAFTER: R.H.S./D.A.S.

CHECKED BY: J.A.G.

SCALE AS NOTED

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: ...\SB_MST_036_179_PLP.dgn

SIGNATURE/ BLOCK:

DESIGNED BY:
LUCHS CONSULTING ENGINEERS, LLC
89 COLONY STREET
MERIDEN, CT 06451

PROJECT TITLE:
ROUTE 8
INTERCHANGE 18
NEW NORTHBOUND ON-RAMP

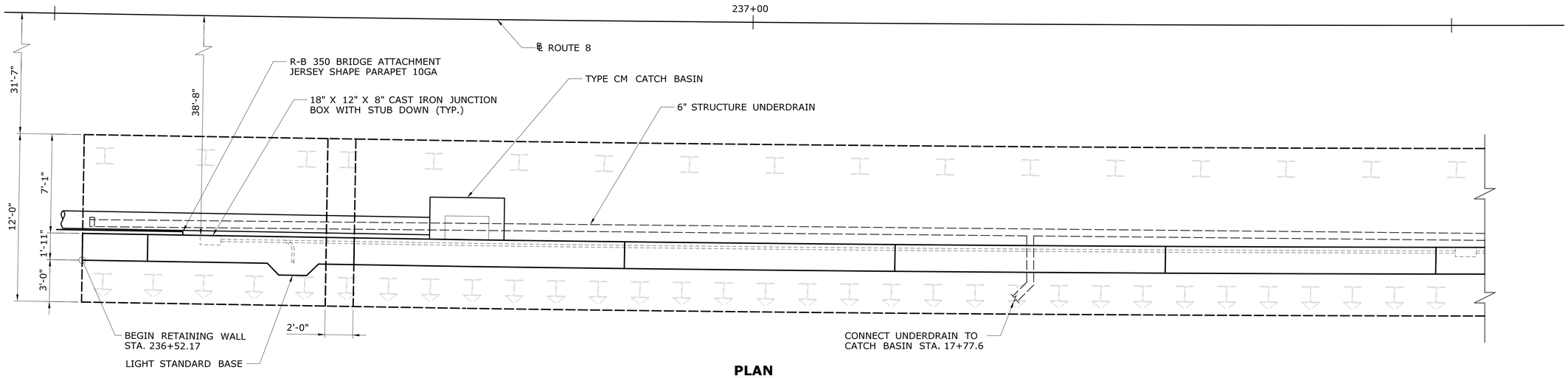
TOWN: ANSONIA AND DERBY

DRAWING TITLE: WALL 101 PILE LAYOUT PLAN

PROJECT NO. 36-179

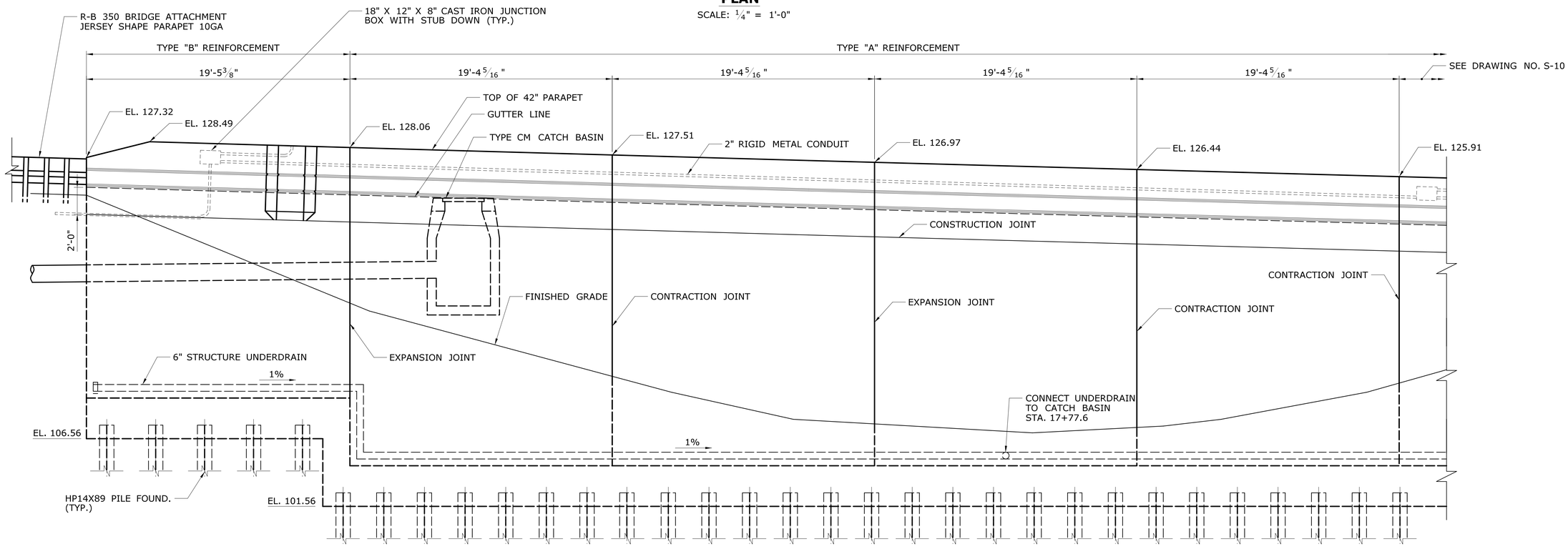
DRAWING NO. S-8

SHEET NO. 05.09



PLAN

SCALE: 1/4" = 1'-0"



ELEVATION

SCALE: 1/4" = 1'-0"

REV.	DATE	REVISION DESCRIPTION	SHEET NO.
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Plotted Date: 4/8/2014

DESIGNER/DRAFTER: **R.H.S./D.A.S.**

CHECKED BY: **J.A.G.**

SCALE AS NOTED

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Filename: ...\SB_MST_036_179_PE1.dgn

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BLOCK:

DESIGNED BY:
LUCHS CONSULTING ENGINEERS, LLC
89 COLONY STREET
MERIDEN, CT 06451

PROJECT TITLE:
ROUTE 8
INTERCHANGE 18
NEW NORTHBOUND ON-RAMP

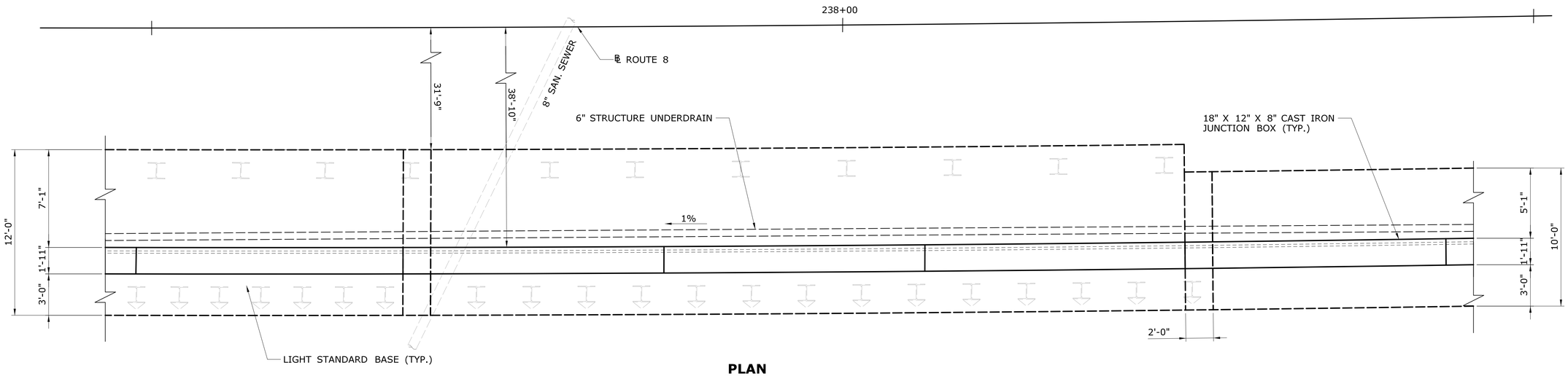
TOWN: **ANSONIA AND DERBY**

DRAWING TITLE: **WALL 101 PLAN AND ELEVATION**

PROJECT NO. **36-179**

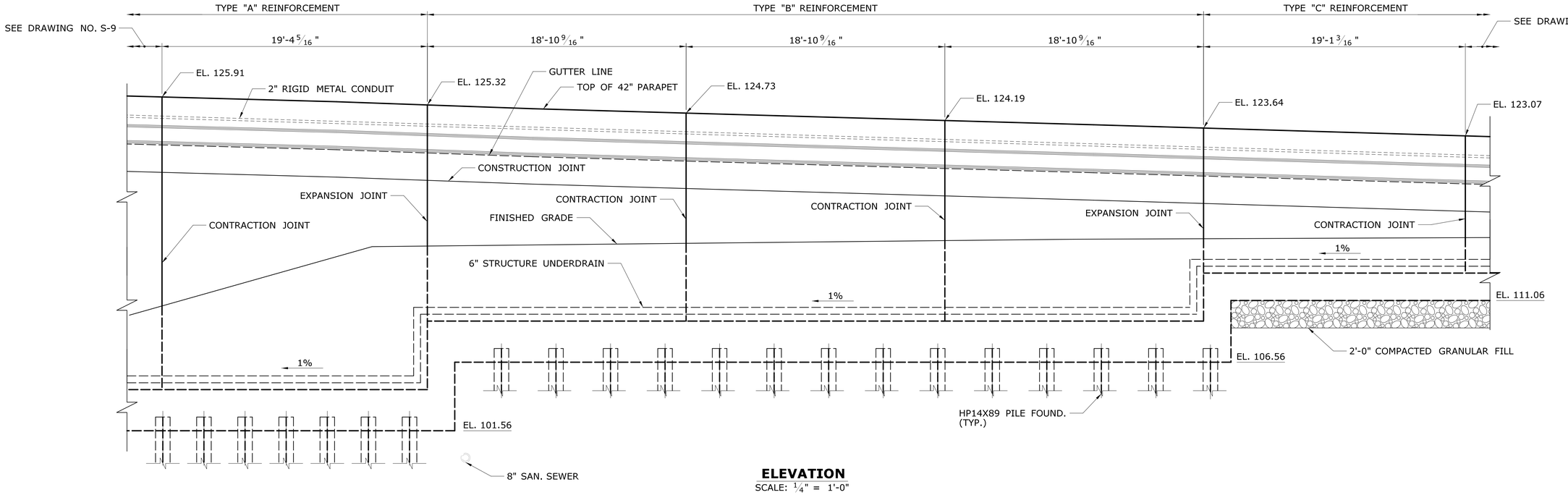
DRAWING NO. **S-9**

SHEET NO. **05.10**



PLAN

SCALE: 1/4" = 1'-0"



ELEVATION

SCALE: 1/4" = 1'-0"

REV.	DATE	REVISION DESCRIPTION	SHEET NO.
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89 COLONY STREET
MERIDEN, CT 06451

PROJECT TITLE:
ROUTE 8
INTERCHANGE 18
NEW NORTHBOUND ON-RAMP

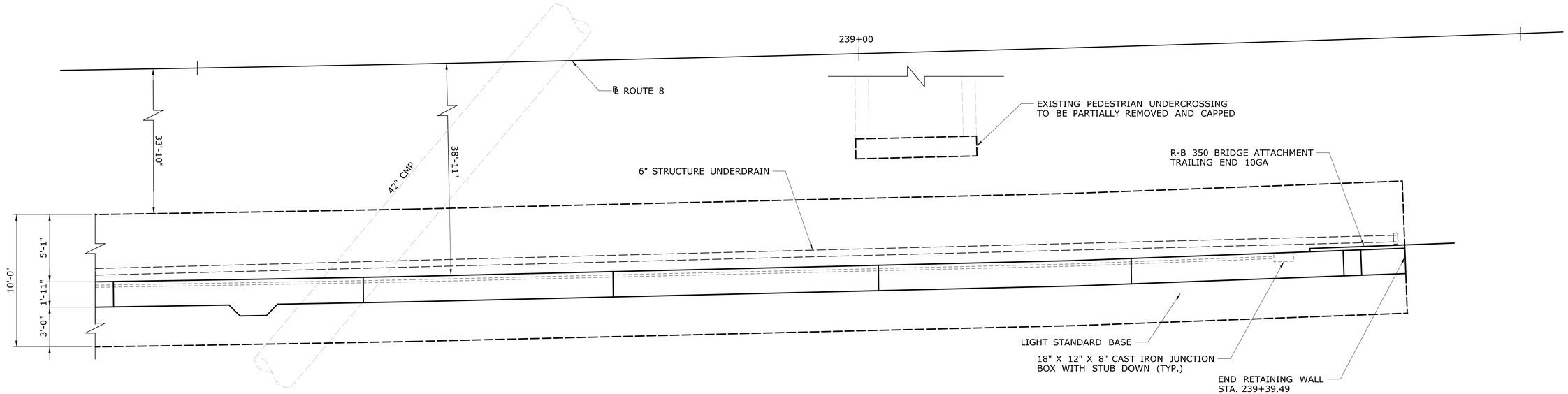
TOWN: **ANSONIA AND DERBY**

DRAWING TITLE: **WALL 101 PLAN AND ELEVATION**

PROJECT NO. **36-179**

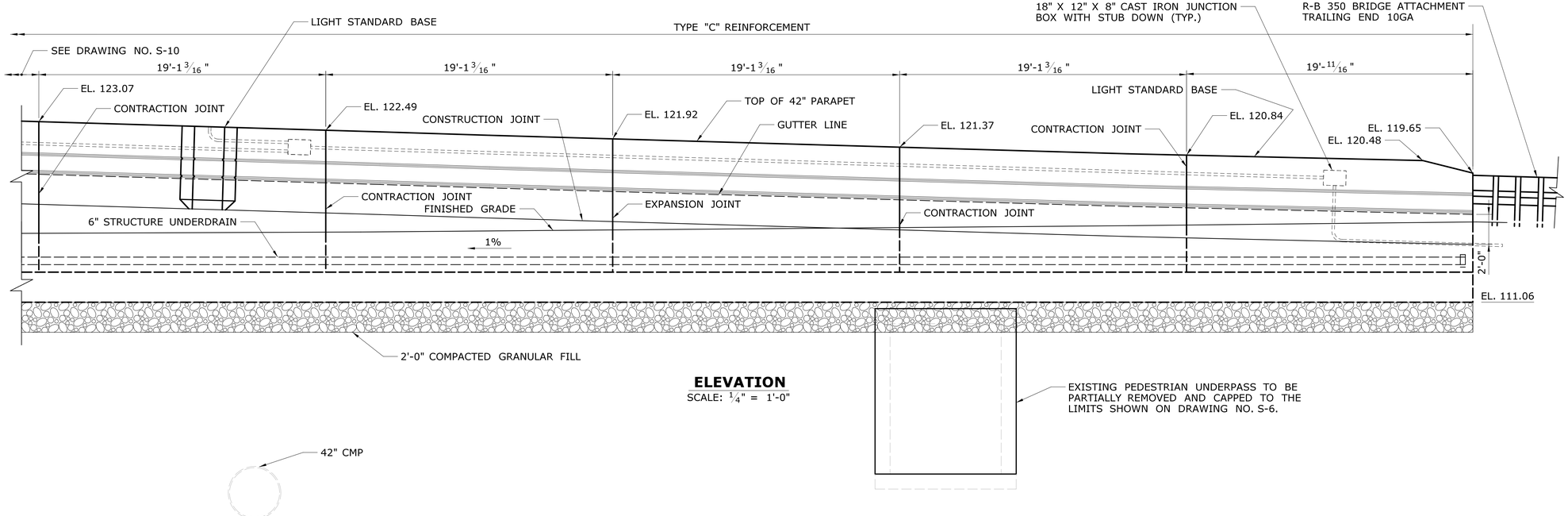
DRAWING NO. **S-10**

SHEET NO. **05.11**



PLAN

SCALE: 1/4" = 1'-0"



ELEVATION

SCALE: 1/4" = 1'-0"

REV.	DATE	REVISION DESCRIPTION	SHEET NO.
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DESIGNED BY:

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89 COLONY STREET
MERIDEN, CT 06451

PROJECT TITLE:

ROUTE 8
INTERCHANGE 18
NEW NORTHBOUND ON-RAMP

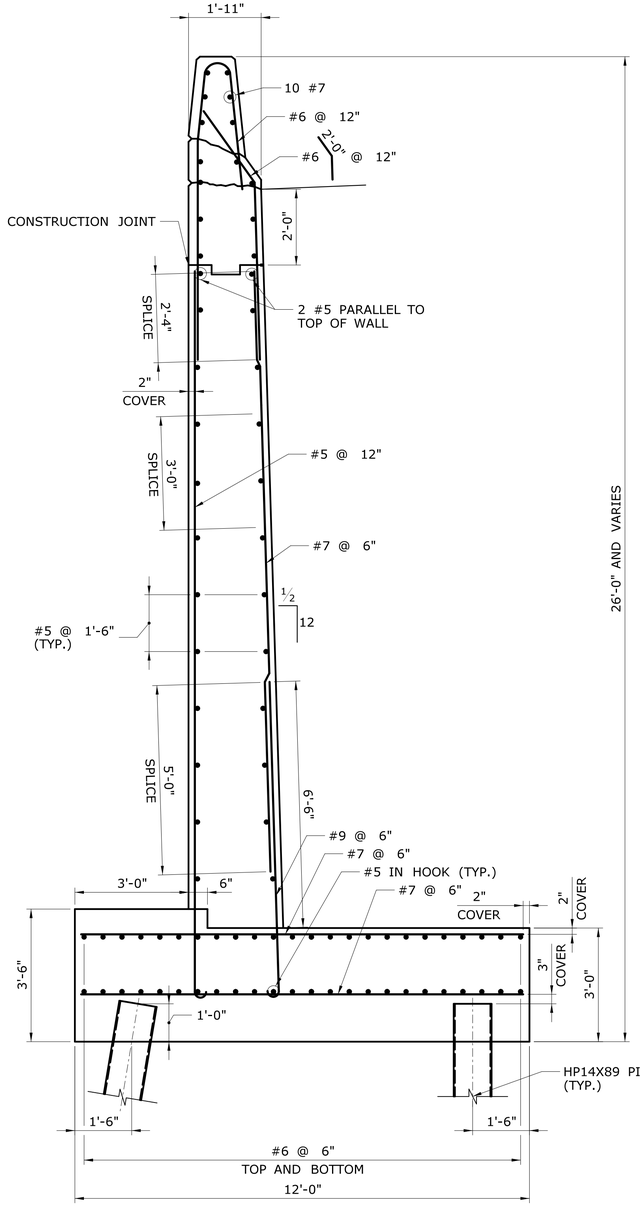
TOWN: **ANSONIA AND DERBY**

DRAWING TITLE: **WALL 101 PLAN AND ELEVATION**

PROJECT NO. **36-179**

DRAWING NO. **S-11**

SHEET NO. **05.12**

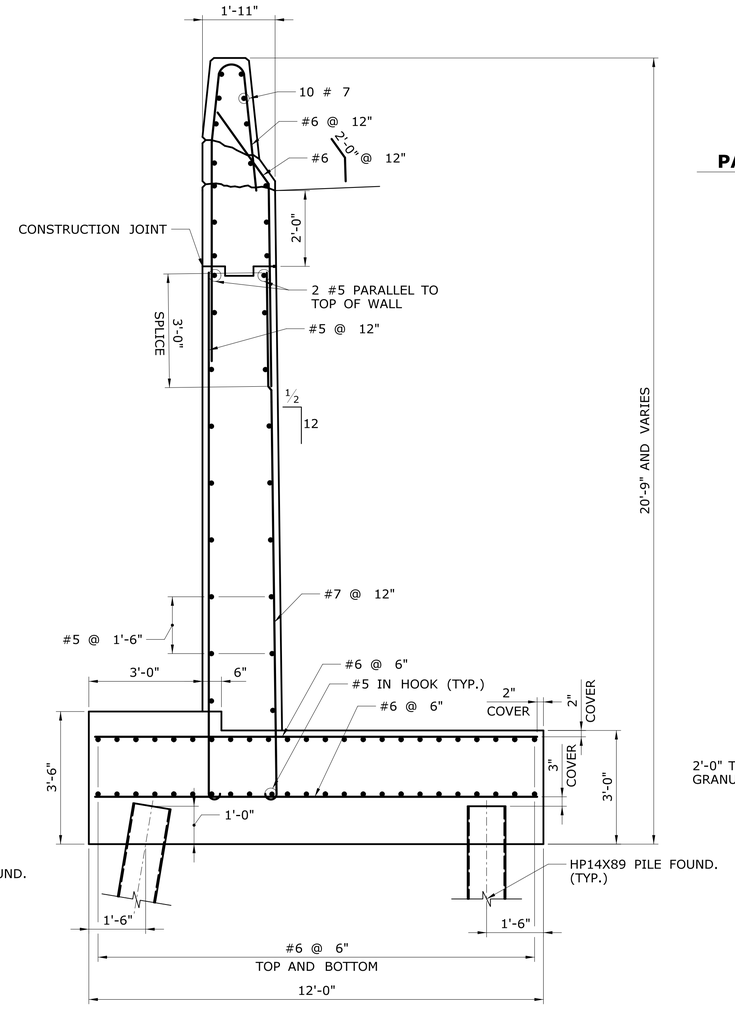


TYPICAL CROSS SECTION
TYPE A

SCALE: 1/2" = 1'-0"

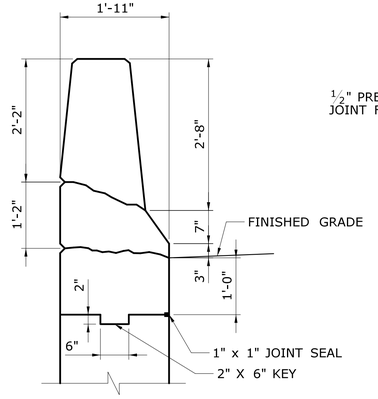
NOTE:

- SEE DRAWING NO. S-13 FOR TYPICAL STEP REINFORCEMENT



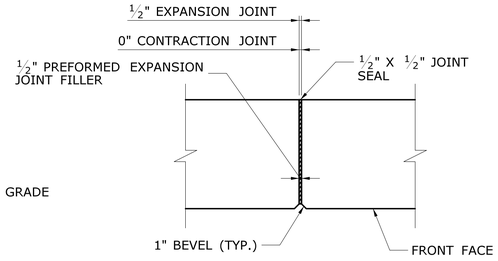
TYPICAL CROSS SECTION
TYPE B

SCALE: 1/2" = 1'-0"



PARAPET TO WALL JOINT DETAIL

SCALE: 3/4" = 1'-0"

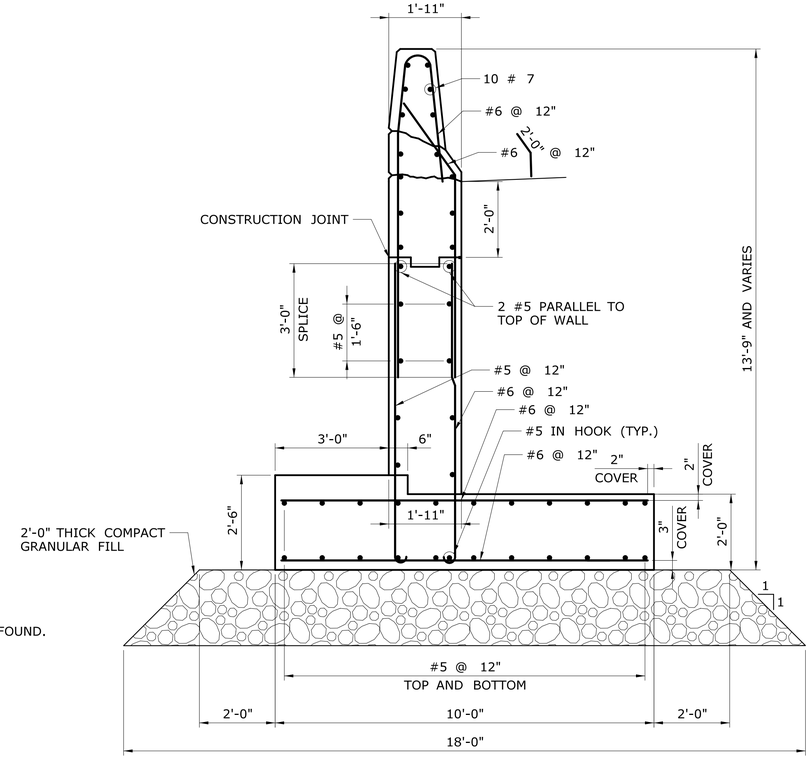


VERTICAL STEM JOINT DETAIL

SCALE: 3/4" = 1'-0"

NOTE:

- NO REINFORCEMENT SHALL PASS THROUGH EXPANSION OR CONTRACTION JOINTS.
- JOINT SEAL SHALL BE INCLUDED UNDER THE ITEM "CLASS A CONCRETE".



TYPICAL CROSS SECTION
TYPE C

SCALE: 1/2" = 1'-0"

REV.	DATE	REVISION DESCRIPTION	SHEET NO.
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Plotted Date: 5/1/2014

DESIGNER/DRAFTER: R.H.S./D.A.S.
CHECKED BY: J.A.G.
SCALE AS NOTED

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: ...\SB_MST_036_179_SEC.dgn

SIGNATURE/ BLOCK:

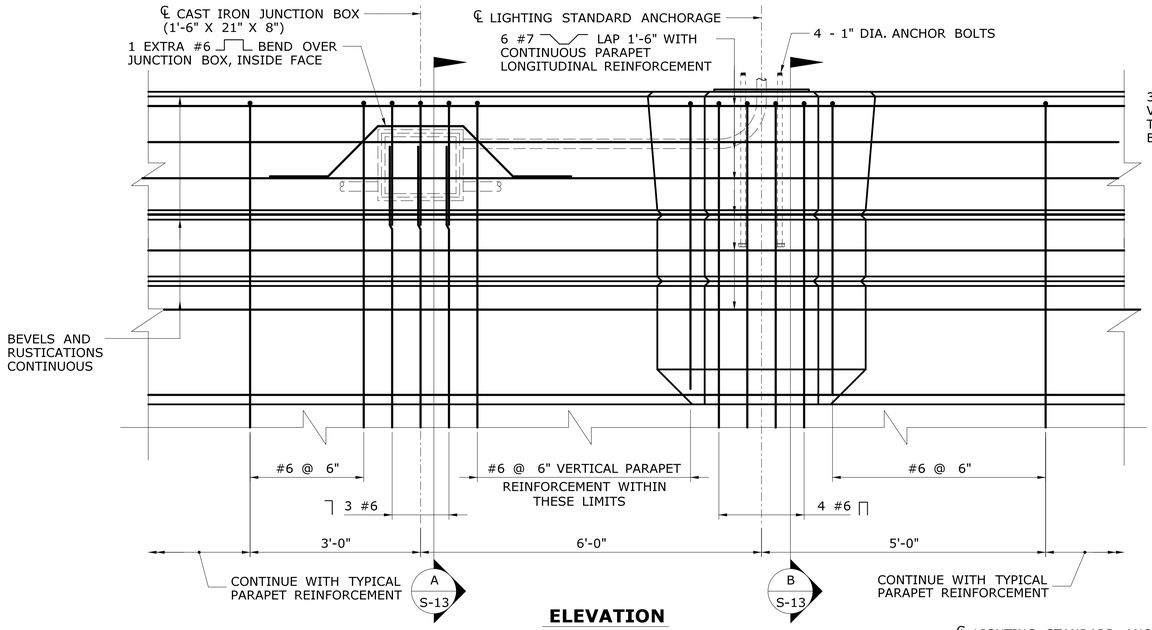
DESIGNED BY:
LUCHS CONSULTING ENGINEERS, LLC
89 COLONY STREET
MERIDEN, CT 06451

PROJECT TITLE:
ROUTE 8
INTERCHANGE 18
NEW NORTHBOUND ON-RAMP

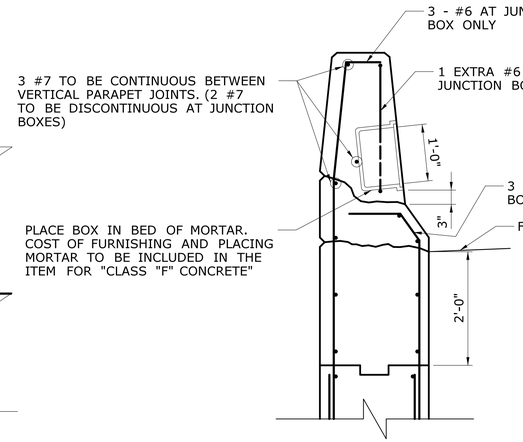
TOWN: ANSONIA/DERBY

DRAWING TITLE: TYPICAL WALL SECTIONS AND REINFORCEMENT

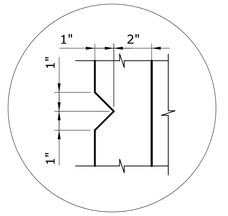
PROJECT NO. 36-179
DRAWING NO. S-12
SHEET NO. 05.13



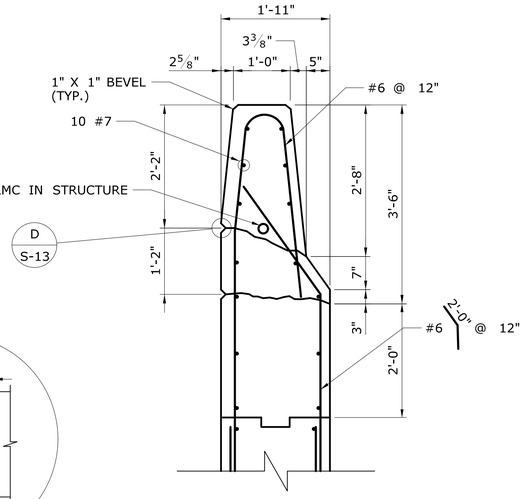
ELEVATION
PARAPET REINFORCEMENT AT LIGHTING STANDARD AND JUNCTION BOX
SCALE: 3/4" = 1'-0"



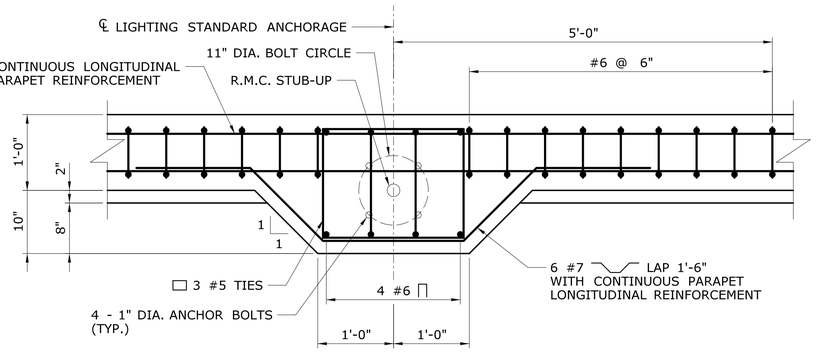
SECTION A
SCALE: 3/4" = 1'-0"



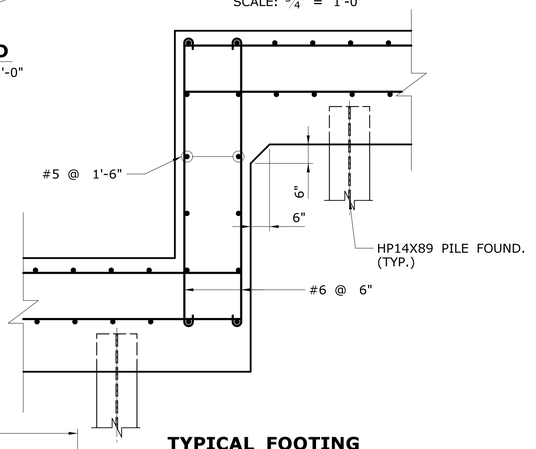
DETAIL D
SCALE: 3" = 1'-0"



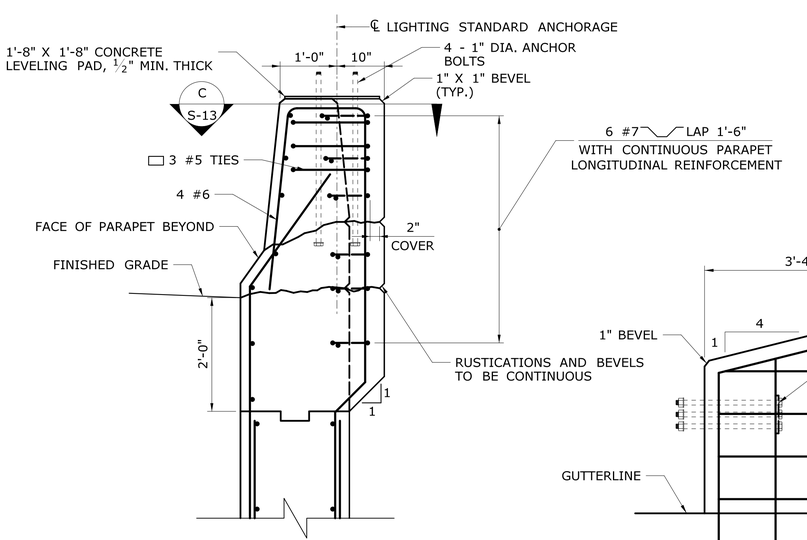
42" PARAPET REINFORCEMENT
SCALE: 3/4" = 1'-0"



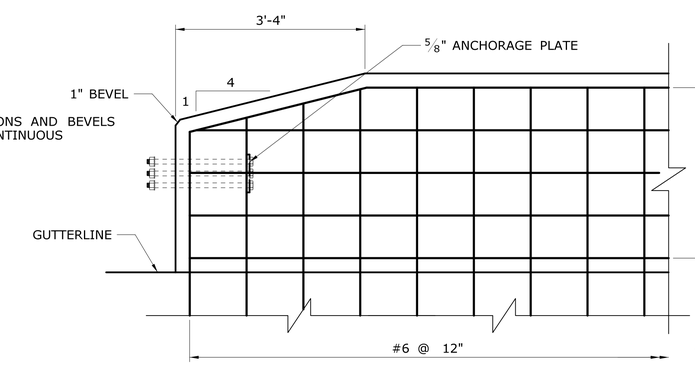
SECTION C
SCALE: 1" = 1'-0"



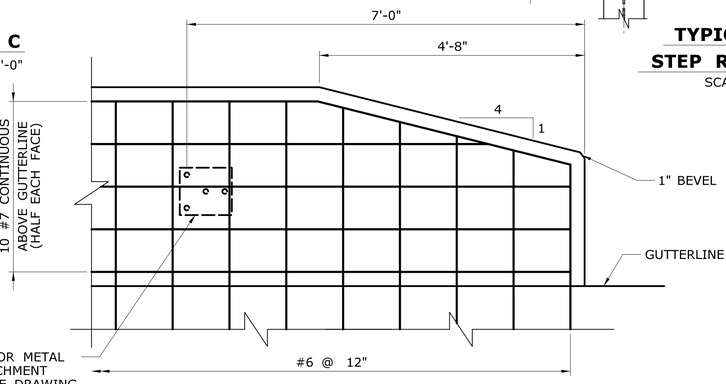
TYPICAL FOOTING STEP REINFORCEMENT
SCALE: 1/2" = 1'-0"



SECTION B
SCALE: 3/4" = 1'-0"



ELEVATION
PARAPET REINFORCEMENT AT TRAILING END
SCALE: 3/4" = 1'-0"



ELEVATION
PARAPET REINFORCEMENT AT LEADING END
SCALE: 3/4" = 1'-0"

NOTES:

- FURNISHING AND INSTALLING ANCHOR BOLTS SHALL BE PAID FOR AT THE UNIT PRICE BID FOR "DEFORMED STEEL BARS".
- FOR ELECTRICAL AND ANCHORAGE DETAILS, SEE DRAWING NUMBER S-15, WHERE APPLICABLE.

REV.	DATE	REVISION DESCRIPTION	SHEET NO.
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-	-	-	-

THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.

Plotted Date: 4/8/2014

DESIGNER/DRAFTER: R.H.S./D.A.S.
CHECKED BY: J.A.G.
SCALE AS NOTED

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

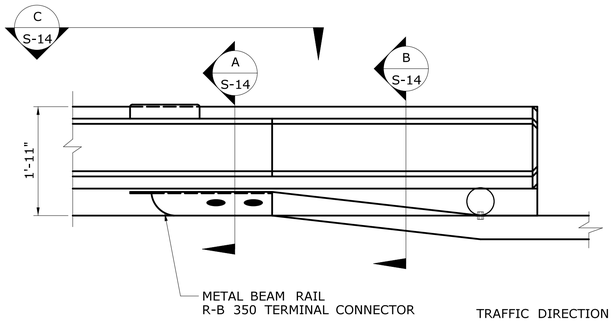
Filename: ...\SB_MST_036_179_PAR.dgn

SIGNATURE/ BLOCK:

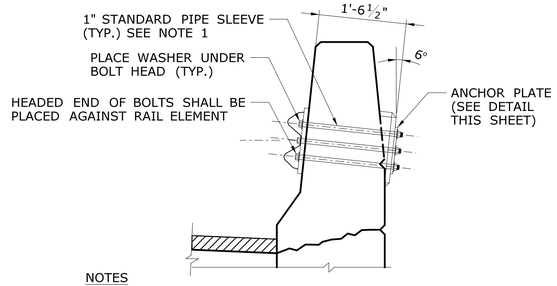
DESIGNED BY:
LUCHS CONSULTING ENGINEERS, LLC
89 COLONY STREET
MERIDEN, CT 06451

PROJECT TITLE:
ROUTE 8
INTERCHANGE 18
NEW NORTHBOUND ON-RAMP

TOWN: ANSONIA AND DERBY
PROJECT NO. 36-179
DRAWING TITLE: MISCELLANEOUS REINFORCEMENT DETAILS
DRAWING NO. S-13
SHEET NO. 05.14



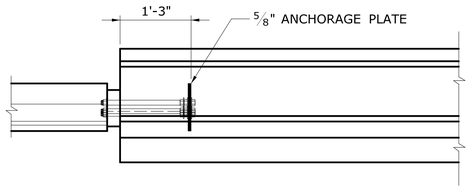
PLAN



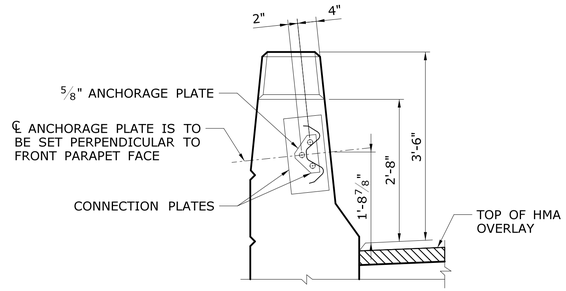
NOTES

1. 1" DIA. PIPE SHALL CONFORM TO ASTM A53 GR. B OR ASTM A501 AND SHALL BE GALVANIZED IN ACCORDANCE WITH THE REQUIREMENTS OF ASTM - A123.
2. ALL STEEL MATERIALS INCLUDING THE ANCHOR PLATE, 1" PIPE SLEEVE AND THE ⅞" DIA. BOLTS, NUTS, AND WASHERS, SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF ASTM A123.

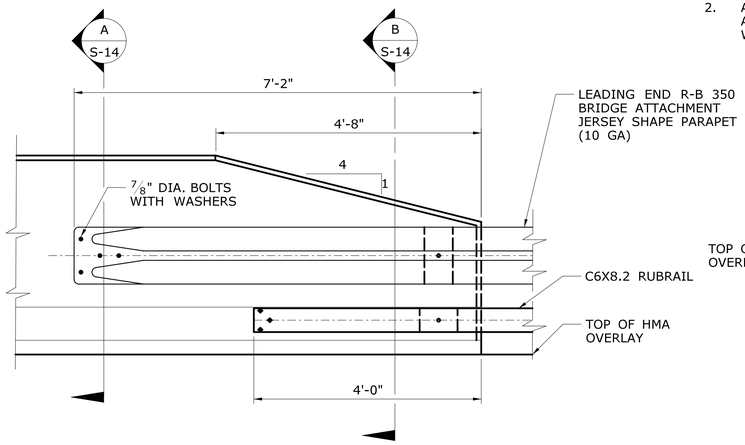
SECTION A-A



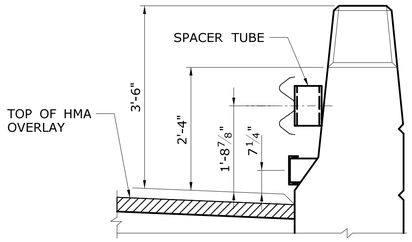
PLAN
SCALE: ¾" = 1'-0"



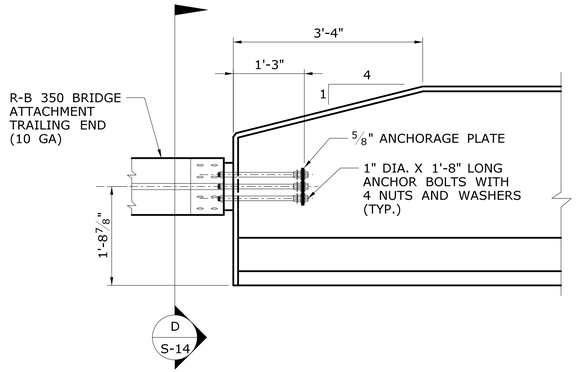
SECTION D-D
SCALE: ¾" = 1'-0"



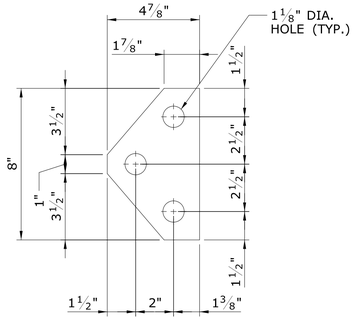
ELEVATION



SECTION B-B



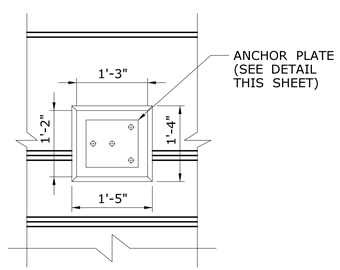
ELEVATION
SCALE: ¾" = 1'-0"



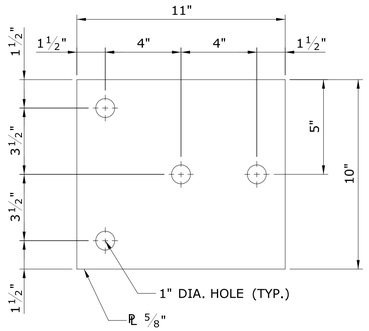
DETAIL B
SCALE: 3" = 1'-0"

LEADING END R-B 350
BRIDGE ATTACHMENT
JERSEY SHAPE PARAPET (10GA)
SCALE: ¾" = 1'-0"

R-B 350 BRIDGE ATTACHMENT
TRAILING END (10 GA)



VIEW C-C
SCALE: ¾" = 1'-0"



ANCHOR PLATE DETAIL
SCALE: 3" = 1'-0"

NOTE:

- LEADING END R-B 350 BRIDGE ATTACHMENT JERSEY SHAPE PARAPET (10 GA) AND R-B 350 BRIDGE ATTACHMENT TRAILING END (10 GA) TO BE PAID FOR AS ROADWAY ITEMS.

REV.	DATE	REVISION DESCRIPTION	SHEET NO.
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Plotted Date: 6/10/2014

DESIGNER/DRAFTER: R.H.S./D.A.S.
CHECKED BY: J.A.G.
SCALE AS NOTED

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: ...\SB_MST_036_179_MBR.dgn

SIGNATURE/
BLOCK:

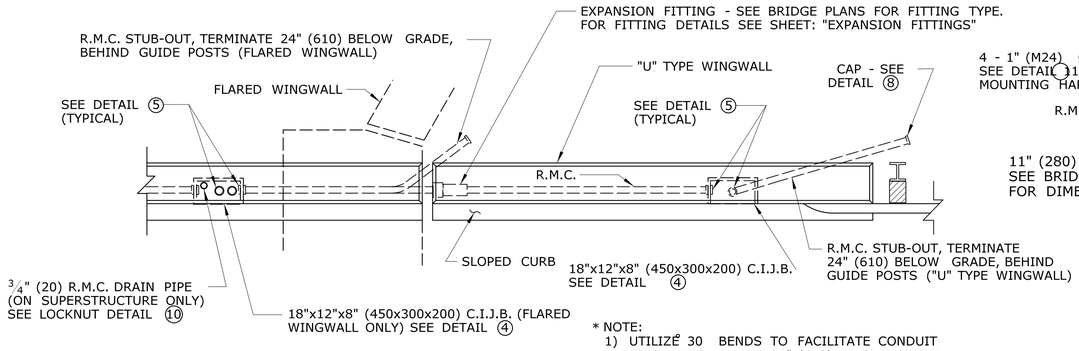
DESIGNED BY:
LUCHS CONSULTING ENGINEERS, LLC
89 COLONY STREET
MERIDEN, CT 06451

PROJECT TITLE:
ROUTE 8
INTERCHANGE 18
NEW NORTHBOUND ON-RAMP

TOWN: ANSONIA AND DERBY

DRAWING TITLE:
METAL BEAM RAIL
ATTACHMENT DETAILS

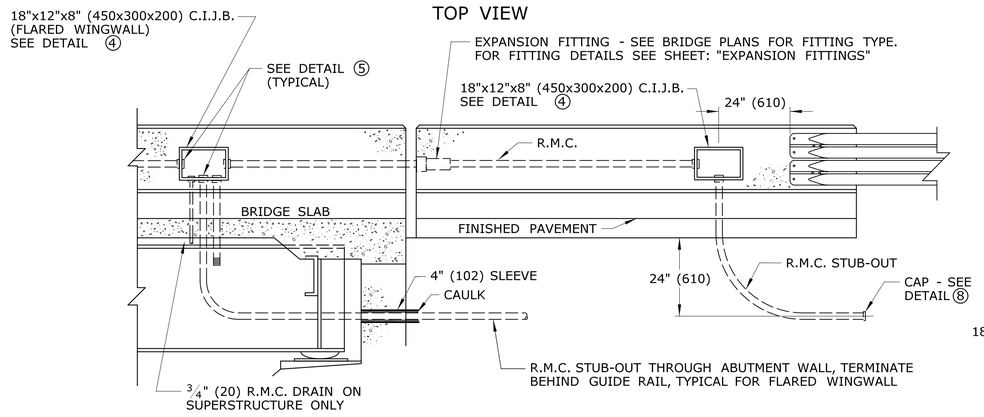
PROJECT NO. 36-179
DRAWING NO. S-14
SHEET NO. 05.15



* NOTE:
1) UTILIZE 30 BENDS TO FACILITATE CONDUIT LEAVING WINGWALL AT 24" (610) BELOW GRADE

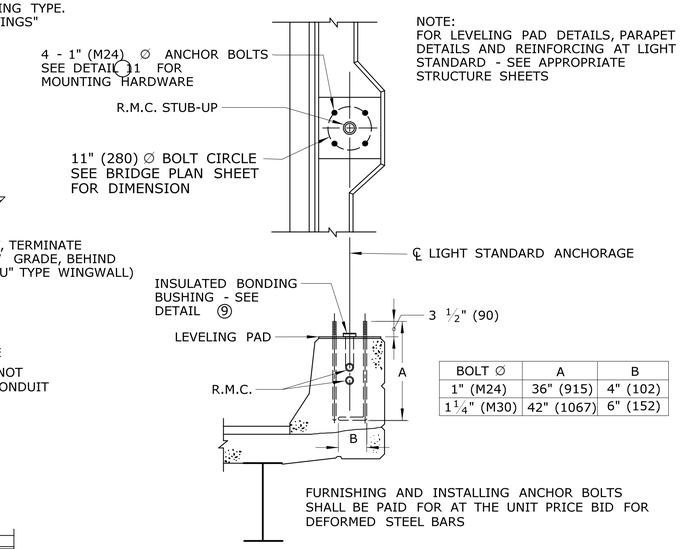
2) CONDUIT BENDS SHALL HAVE A RADIUS OF NOT LESS THAN 6 TIMES THE TRADE SIZE OF THE CONDUIT

TOP VIEW



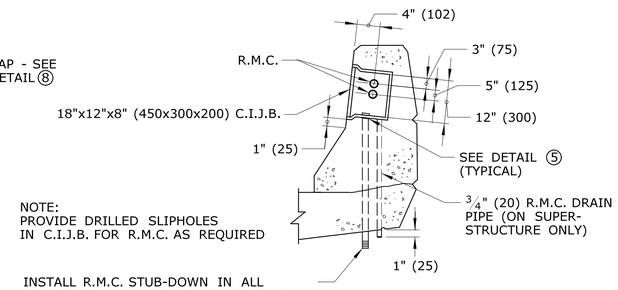
(1) CONDUIT PARAPET TO FILL

(2) LIGHT STANDARD ON PARAPET WALL

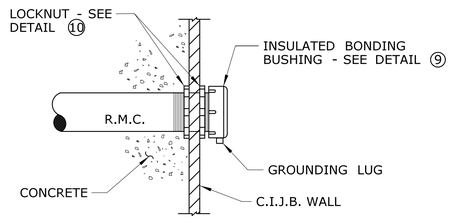


BOLT ∅	A	B
1" (M24)	36" (915)	4" (102)
1 1/4" (M30)	42" (1067)	6" (152)

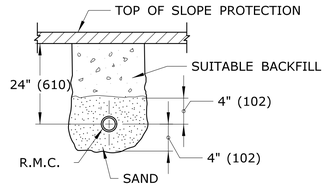
(3) PARAPET TREATMENT AT LIGHT STANDARD



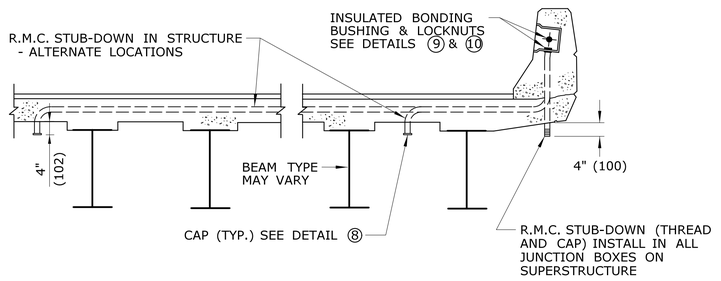
(4) JUNCTION BOX INSTALLATION



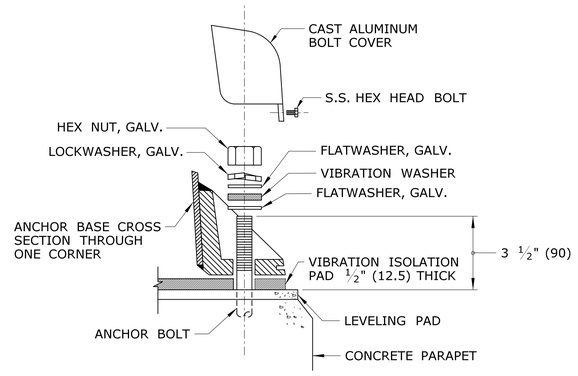
(5) CONDUIT ENTRY INTO CAST IRON JUNCTION BOX



(7) RIGID METAL CONDUIT UNDER SLOPE PROTECTION

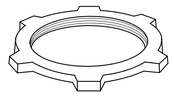


(6) SERVICE TO LUMINAIRE UNDER STRUCTURE

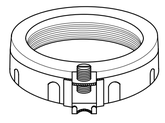


(11) ANCHOR BASE LIGHT STANDARD MOUNTING HARDWARE

(8) MALLEABLE IRON CAP



(10) LOCKNUT



(9) INSULATED BONDING BUSHING WITH GROUND LUG

NOTES:

1) SEE BRIDGE PLANS FOR SPECIFIC CONSTRUCTION DETAILS AND LOCATIONS.

2) DIAMETER OF RIGID METAL CONDUIT SHALL BE AS CALLED FOR ON BRIDGE PLANS.

3) R.M.C. STUB-UPS TO LIGHT STANDARDS, STUB-OUTS TO FILL, AND STUB-DOWNS TO UNDERBRIDGE LUMINAIRES, SHALL BE OF THE SAME DIAMETER AS THE R.M.C. CAST IN THE PARAPET WALL.

4) INSTALL ONE R.M.C. STUB-DOWN IN ALL JUNCTION BOXES ON SUPERSTRUCTURE. ADDITIONAL STUB-DOWNS SHALL BE INSTALLED WHERE INDICATED ON THE PLANS.

5) USE APPLICABLE DETAILS.

REV.	DATE	REVISION DESCRIPTION	SHEET NO.
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Plotted Date: 4/29/2014

DESIGNER/DRAFTER: MSB
CHECKED BY: JA
NO SCALE

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: ...\SB_MST_036_179_ELEC.dgn

SIGNATURE/ BLOCK:

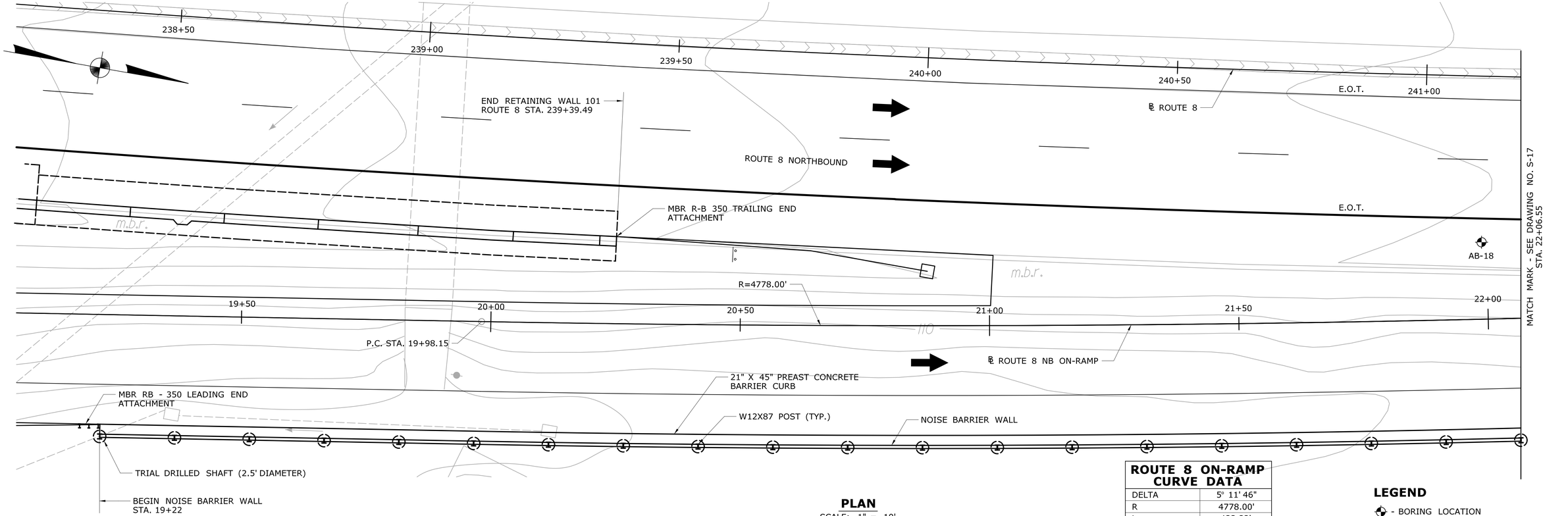
DESIGNED BY:
LUCHS CONSULTING ENGINEERS, LLC
89 COLONY STREET
MERIDEN, CT 06451

PROJECT TITLE:
ROUTE 8
INTERCHANGE 18
NEW NORTHBOUND ON-RAMP

TOWN: ANSONIA/DERBY

DRAWING TITLE: ELECTRICAL DETAILS

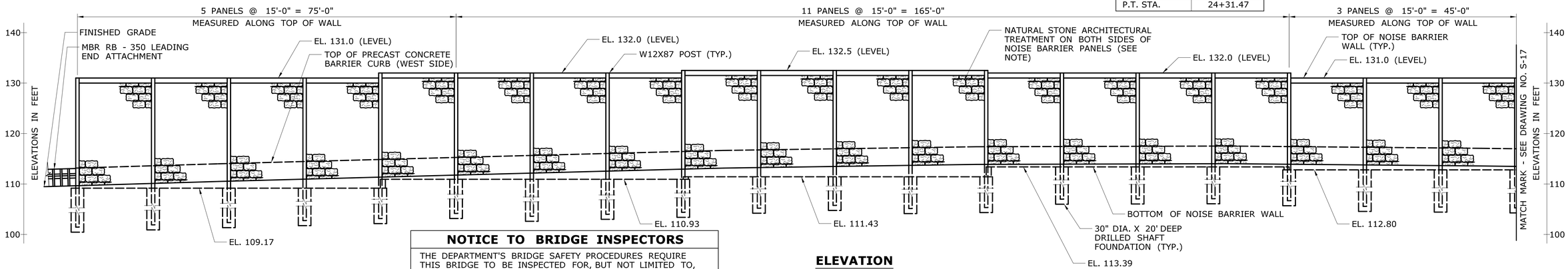
PROJECT NO. 36-179
DRAWING NO. S-15
SHEET NO. 05.16



PLAN
SCALE: 1" = 10'

ROUTE 8 ON-RAMP CURVE DATA	
DELTA	5° 11' 46"
R	4778.00'
L	433.32'
T	216.81'
P.C. STA.	19+98.15
P.T. STA.	24+31.47

LEGEND
- BORING LOCATION



ELEVATION
SCALE: 1" = 10'

EAST ELEVATION SHOWN, SEE SECTION B ON DRAWING NUMBER S-33 FOR WEST ELEVATION LIMITS

INSPECTION OF FIELD WELDS		
METHOD	UNIT	QUANTITY
ULTRASONIC	IN	0
MAGNETIC PARTICLE	FT	0

CONCRETE DISTRIBUTION	
SUPERSTRUCTURE	0 C.Y.
SUBSTRUCTURE	355 C.Y.
FOOTINGS	0 C.Y.
TOTAL	355 C.Y.

TRANSPORTATION DIMENSIONS AND WEIGHT			
MEMBER	SHIPPING LENGTH	SHIPPING HEIGHT	SHIPPING WEIGHT
STEEL POST	40 FEET	1 FOOT	8500 LBS.

NOTICE TO BRIDGE INSPECTORS

THE DEPARTMENT'S BRIDGE SAFETY PROCEDURES REQUIRE THIS BRIDGE TO BE INSPECTED FOR, BUT NOT LIMITED TO, ALL APPROPRIATE COMPONENTS INDICATED IN THE GOVERNING MANUALS FOR BRIDGE INSPECTION. ATTENTION MUST BE GIVEN TO INSPECTING THE FOLLOWING SPECIAL COMPONENTS AND DETAILS. (THE LISTING OF COMPONENTS FOR SPECIFIC ATTENTION SHALL NOT BE CONSTRUED TO REDUCE THE IMPORTANCE OF INSPECTION OF ANY OTHER COMPONENT OF THE STRUCTURE). THE FREQUENCY OF INSPECTION OF THIS STRUCTURE SHALL BE IN ACCORDANCE WITH THE GOVERNING MANUALS FOR BRIDGE INSPECTION, UNLESS OTHERWISE DIRECTED BY THE MANAGER OF BRIDGE SAFETY AND EVALUATION.

COMPONENTS OR DETAILS	BRIDGE SHEET REFERENCE
NONE	NONE

NOTE:

THE NATURAL STONE ARCHITECTURAL TREATMENT BASED ON ARMTEC LTD. SPECIFICATIONS.

REV.	DATE	REVISION DESCRIPTION	SHEET NO.
-	-	-	-
-	-	-	-
-	-	-	-
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Plotted Date: 6/11/2014

DESIGNER/DRAFTER: D. SCHMALTZ
CHECKED BY: R. SALEH
SCALE AS NOTED

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: ...\SB_MSH_036_179_GPN1.dgn

SIGNATURE/ BLOCK:

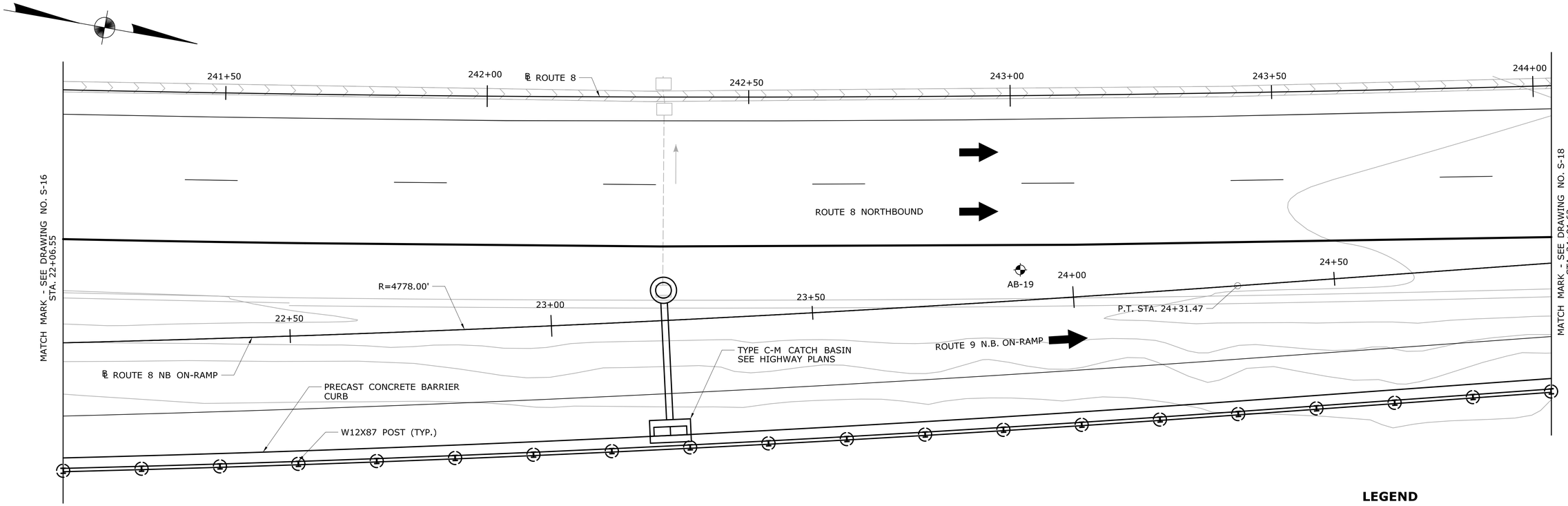
DESIGNED BY:
LUCHS CONSULTING ENGINEERS, LLC
89 COLONY STREET
MERIDEN, CT 06451

PROJECT TITLE:
ROUTE 8
INTERCHANGE 18
NEW NORTHBOUND ON-RAMP

TOWN: ANSONIA AND DERBY

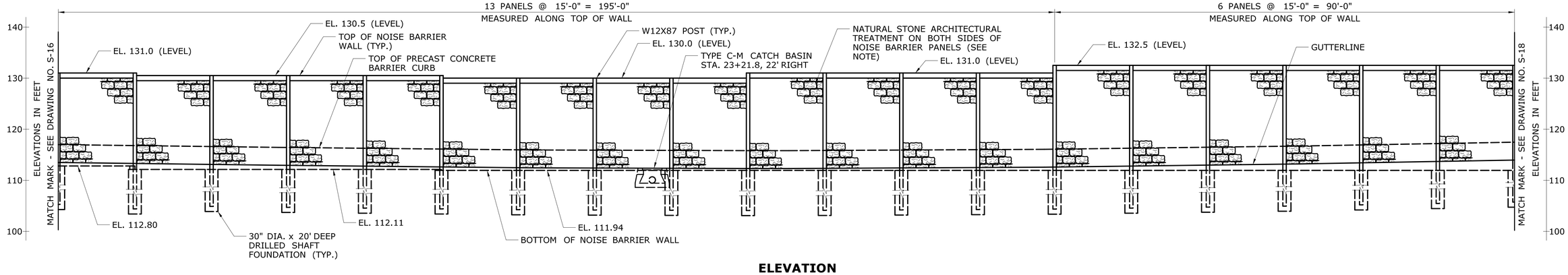
DRAWING TITLE: NOISE BARRIER WALL GENERAL PLAN & ELEVATION 1

PROJECT NO. 36-179
DRAWING NO. S-16
SHEET NO. 05.17



PLAN
SCALE: 1" = 10'

LEGEND
- BORING LOCATION



ELEVATION
SCALE: 1" = 10'

EAST ELEVATION SHOWN, SEE SECTION B ON DRAWING NUMBER S-33
FOR WEST ELEVATION LIMITS.

NOTE:

THE NATURAL STONE ARCHITECTURAL TREATMENT BASED ON ARMTEC, LTD. SPECIFICATIONS.

REV.	DATE	REVISION DESCRIPTION	SHEET NO.
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Plotted Date: 5/2/2014

DESIGNER/DRAFTER: **D. SCHMALTZ**
CHECKED BY: **R. SALEH**
SCALE AS NOTED

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: ...\SB_MSH_036_179_GPN2.dgn

SIGNATURE/
BLOCK:

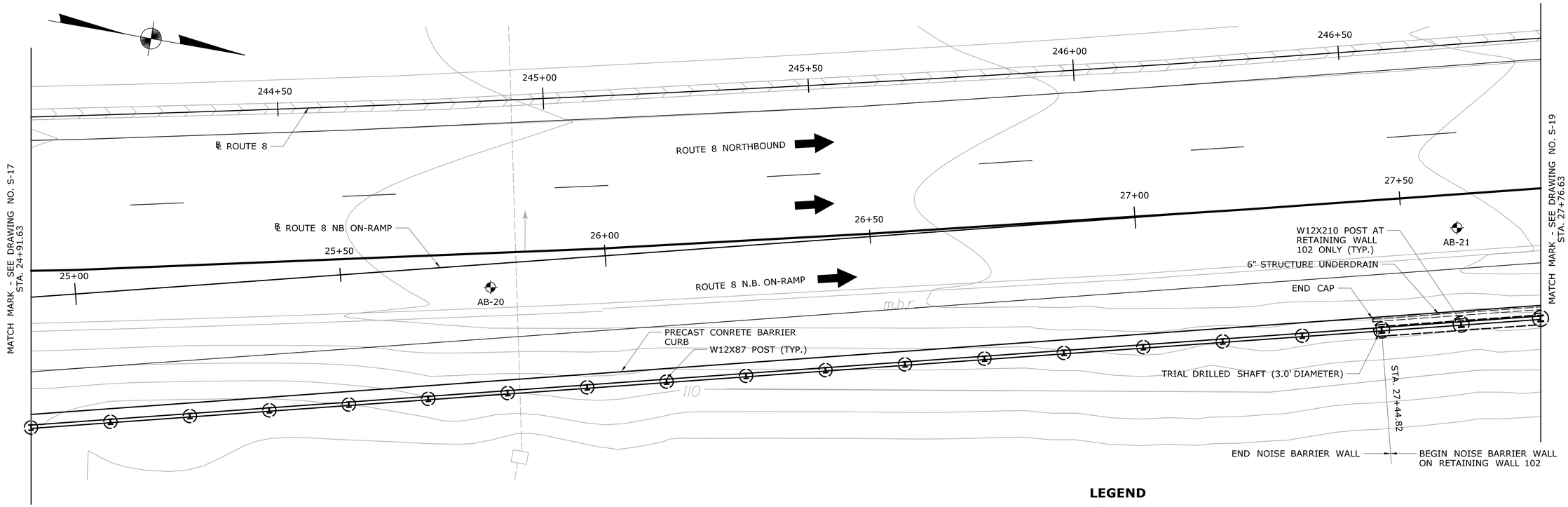
DESIGNED BY:
LUCHS CONSULTING ENGINEERS, LLC
89 COLONY STREET
MERIDEN, CT 06451

PROJECT TITLE:
ROUTE 8
INTERCHANGE 18
NEW NORTHBOUND ON-RAMP

TOWN: **ANSONIA AND DERBY**

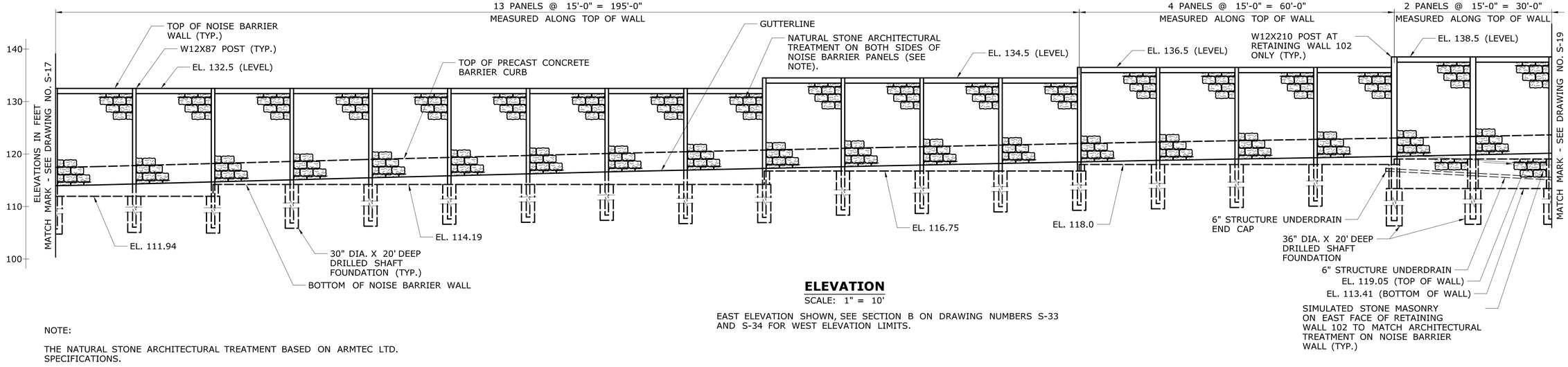
DRAWING TITLE:
NOISE BARRIER WALL
GENERAL PLAN &
ELEVATION 2

PROJECT NO. **36-179**
DRAWING NO. **S-17**
SHEET NO. **05.18**



PLAN
SCALE: 1" = 10'

LEGEND
⌖ - BORING LOCATION



ELEVATION
SCALE: 1" = 10'

EAST ELEVATION SHOWN, SEE SECTION B ON DRAWING NUMBERS S-33 AND S-34 FOR WEST ELEVATION LIMITS.

NOTE:

THE NATURAL STONE ARCHITECTURAL TREATMENT BASED ON ARMTEC LTD. SPECIFICATIONS.

REV.	DATE	REVISION DESCRIPTION	SHEET NO.
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THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.

Plotted Date: 6/11/2014

DESIGNER/DRAFTER: **D. SCHMALTZ**
CHECKED BY: **R. SALEH**

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: ...\SB_MSH_036_179_GPN3.dgn

SIGNATURE/ BLOCK:

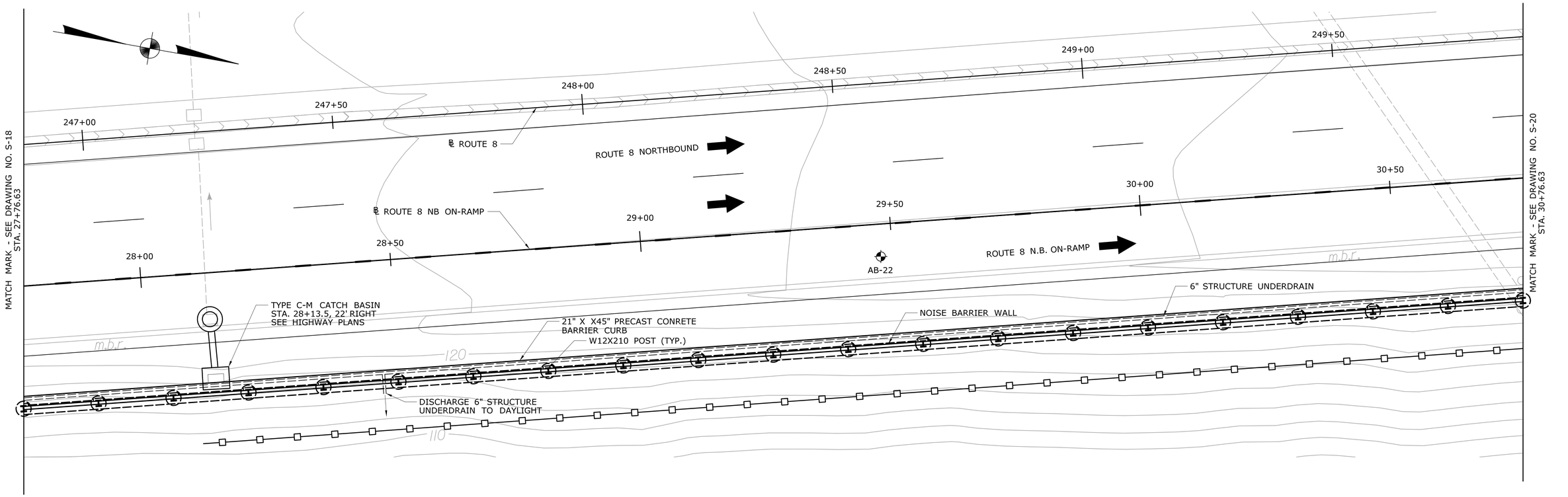
DESIGNED BY:
LUCHS CONSULTING ENGINEERS, LLC
89 COLONY STREET
MERIDEN, CT 06451

PROJECT TITLE:
ROUTE 8
INTERCHANGE 18
NEW NORTHBOUND ON-RAMP

TOWN: **ANSONIA AND DERBY**

DRAWING TITLE: **NOISE BARRIER WALL AND WALL 102 GENERAL PLAN & ELEVATION 3**

PROJECT NO. **36-179**
DRAWING NO. **S-18**
SHEET NO. **05.19**

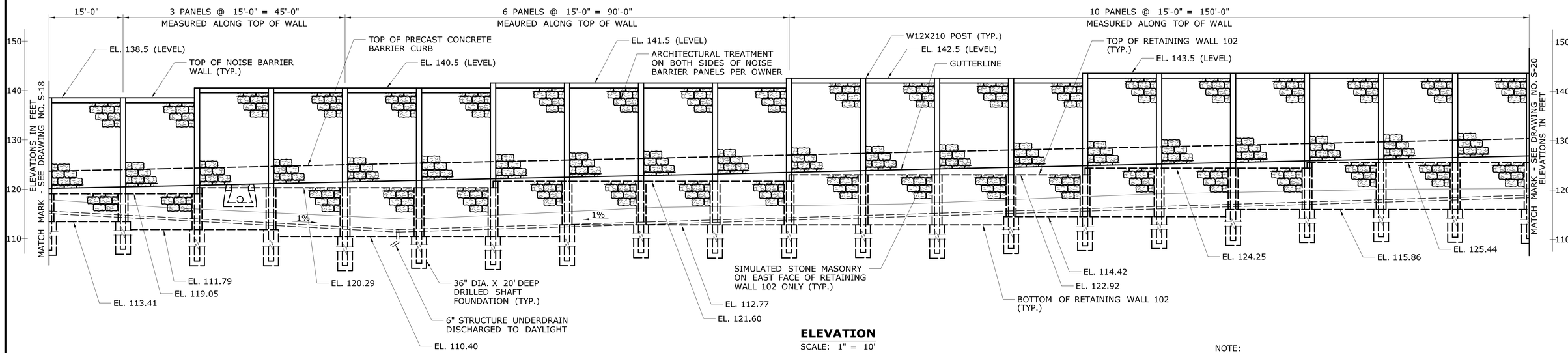


PLAN

SCALE: 1" = 10'

LEGEND

- BORING LOCATION



ELEVATION

SCALE: 1" = 10'

EAST ELEVATION SHOWN, SEE SECTION B ON DRAWING NUMBER S-34
FOR WEST ELEVATION LIMITS

NOTE:

THE NATURAL STONE ARCHITECTURAL TREATMENT IS BASED ON ARMTEC LTD. SPECIFICATIONS.

REV.	DATE	REVISION DESCRIPTION	SHEET NO.
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Plotted Date: 5/2/2014

DESIGNER/DRAFTER: **D. SCHMALTZ**
CHECKED BY: **R. SALEH**
SCALE AS NOTED

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: ...\SB_MSH_036_179_GPN4.dgn

SIGNATURE/
BLOCK:

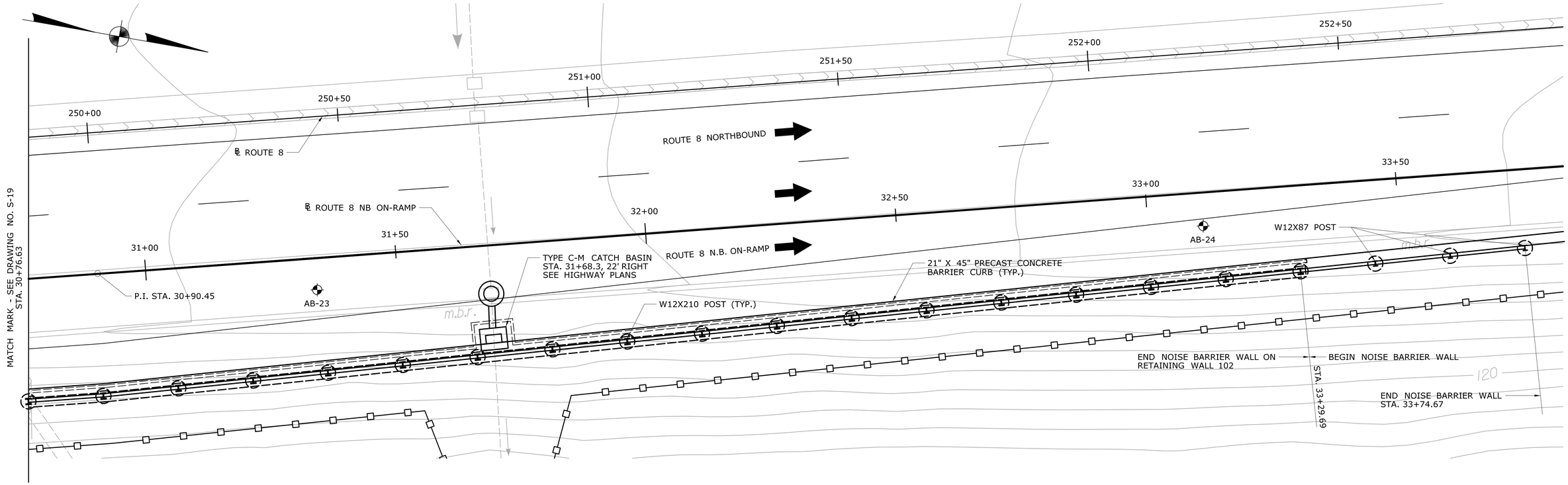
DESIGNED BY:
LUCHS CONSULTING ENGINEERS, LLC
89 COLONY STREET
MERIDEN, CT 06451

PROJECT TITLE:
ROUTE 8
INTERCHANGE 18
NEW NORTHBOUND ON-RAMP

TOWN: **ANSONIA AND DERBY**

DRAWING TITLE:
NOISE BARRIER WALL AND WALL 102 GENERAL PLAN & ELEVATION 4

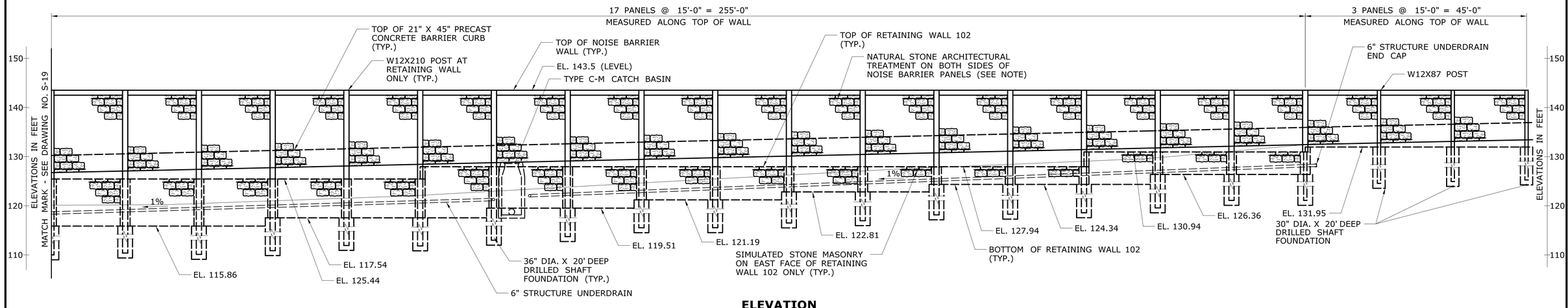
PROJECT NO. **36-179**
DRAWING NO. **S-19**
SHEET NO. **05.20**



PLAN
SCALE: 1" = 10'

LEGEND

⊕ - BORING LOCATION



ELEVATION
SCALE: 1" = 10'

EAST ELEVATION SHOWN, SEE SECTION B ON DRAWING NUMBERS S-33 AND S-34 FOR WEST ELEVATION LIMITS.

NOTE:

THE NATURAL STONE ARCHITECTURAL TREATMENT IS PER ARMTEC LTD. SPECIFICATIONS.

REV.	DATE	REVISION DESCRIPTION	SHEET NO.
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Plotted Date: 5/2/2014

DESIGNER/DRAFTER: **D. SCHMALTZ**
CHECKED BY: **R. SALEH**
SCALE AS NOTED

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: ...\SB_MSH_036_179_GPN5.dgn

SIGNATURE/ BLOCK:

DESIGNED BY:
LUCHS CONSULTING ENGINEERS, LLC
89 COLONY STREET
MERIDEN, CT 06451

PROJECT TITLE:
ROUTE 8
INTERCHANGE 18
NEW NORTHBOUND ON-RAMP

TOWN: **ANSONIA AND DERBY**

DRAWING TITLE: **NOISE BARRIER WALL AND WALL 102 GENERAL PLAN & ELEVATION 5**

PROJECT NO. **36-179**
DRAWING NO. **S-20**
SHEET NO. **05.21**

QUANTITIES

ITEM	UNIT	QUANTITY
COMPACTED GRANULAR FILL	C.Y.	95
PERVIOUS STRUCTURE BACKFILL	C.Y.	1350
CLASS "A" CONCRETE	C.Y.	355
SIMULATED STONE MASONRY	S.Y.	470
1" PREFORMED EXPANSION JOINT FILLER FOR BRIDGES	S.F.	5500
DEFORMED STEEL BARS	LBS.	55000
6" C.C.M. PIPE	L.F.	10
OBSTRUCTIONS	HR.	40
FURNISHING DRILLED SHAFT DRILLING EQUIPMENT	L.S.	L.S.
TRIAL DRILLED SHAFT (2.5' DIAMETER)	L.F.	20
TRIAL DRILLED SHAFT (3.0' DIAMETER)	L.F.	20
DRILLED SHAFT (2.5 FT)	L.F.	1200
DRILLED SHAFT ROCK EXCAVATION (2.5 FT)	L.F.	60
DRILLED SHAFT EARTH EXCAVATION (2.5 FT)	L.F.	1200
DRILLED SHAFT (3.0' DIAMETER)	L.F.	820
DRILLED SHAFT ROCK EXCAVATION (3' DIAMETER)	L.F.	42
DRILLED SHAFT EARTH EXCAVATION (3.0' DIAMETER)	L.F.	820
INTEGRITY TESTING - CROSS HOLE	EA.	50
ACCESS TUBES	L.F.	4000
DAMPPROOFING	S.Y.	470
6" STRUCTURE UNDERDRAIN	L.F.	600
NOISE BARRIER WALL	S.F.	27000

GENERAL NOTES

SPECIFICATIONS: CONNECTICUT DEPARTMENT OF TRANSPORTATION FORM 816 (2004), SUPPLEMENTAL SPECIFICATIONS DATED JANUARY 2014 AND SPECIAL PROVISIONS.

DESIGN SPECIFICATIONS: AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS - 6TH EDITION, 2012 WITH INTERIM SPECIFICATIONS INCLUDING AND UP TO 2013 AS SUPPLEMENTED BY THE CONNECTICUT DEPARTMENT OF TRANSPORTATION BRIDGE DESIGN MANUAL (2003).

ALLOWABLE DESIGN STRESSES:

CLASS "A" CONCRETE	BASED ON f'c = 3300 PSI
REINFORCEMENT (ASTM A615 GRADE 60)	fy = 60,000 PSI
STRUCTURAL STEEL (POSTS) (AASHTO M270 GRADE 50)	fy = 50,000 PSI

NOISE BARRIER WALL DESIGN CRITERIA:

WIND VELOCITY:	110 MPH
WIND PRESSURE:	38 PSF

LIVE LOAD: AASHTO HL93 LOADING

DIMENSIONS: ALL DIMENSIONS SHOWN ON THE PLANS ARE IN FEET AND INCHES UNLESS OTHERWISE NOTED. ALL ELEVATIONS ARE GIVEN IN FEET. WHEN ELEVATIONS ARE GIVEN TO LESS THAN THREE DECIMAL PLACES, THE OMITTED DIGITS SHALL BE ASSUMED TO BE ZERO.

EXISTING DIMENSIONS: THE CONTRACTOR SHALL TAKE ALL FIELD MEASUREMENTS NECESSARY TO ASSURE PROPER FIT OF THE FINISHED WORK AND SHALL ASSUME FULL RESPONSIBILITY FOR THEIR ACCURACY. WHEN SHOP DRAWINGS BASED ON FIELD MEASUREMENTS ARE SUBMITTED FOR APPROVAL, THE FIELD MEASUREMENTS SHALL ALSO BE SUBMITTED FOR REFERENCE BY THE REVIEWER.

EXISTING UTILITIES: THE CONTRACTOR SHALL FIELD VERIFY THE LOCATIONS AND INVERT ELEVATIONS FOR ALL EXISTING UTILITIES WITHIN THE LIMITS OF CONSTRUCTION.

CONCRETE NOTES

REMAIN-IN-PLACE FORMS: THE USE OF REMAIN-IN-PLACE FORMS ON THIS STRUCTURE ARE NOT ALLOWED.

CLASS "A" CONCRETE: CLASS "A" CONCRETE SHALL BE USED FOR RETAINING WALL 102.

DRILLED SHAFTS: SEE SPECIAL PROVISIONS.

EXPOSED EDGES: EXPOSED EDGES OF CONCRETE SHALL BE BEVELED 1" x 1" UNLESS DIMENSIONED OTHERWISE.

CONCRETE COVER: ALL REINFORCEMENT SHALL HAVE TWO INCHES COVER UNLESS DIMENSIONED OTHERWISE.

REINFORCEMENT: ALL REINFORCEMENT SHALL BE ASTM A615 GRADE 60.

PREFORMED EXPANSION JOINT FILLER: THE PREFORMED EXPANSION JOINT FILLER WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE FOOT UNDER THE ITEM "1" PREFORMED EXPANSION JOINT FILLER FOR BRIDGES" COMPLETE IN PLACE, WHICH PRICE SHALL INCLUDE ALL MATERIALS, EQUIPMENT, TOOLS, LABOR AND WORK INCIDENTAL THERETO.

NOISE BARRIER WALL: SEE SPECIAL PROVISIONS.

LIST OF NOISE BARRIER WALL MANUFACTURERS

ARMTEC LTD.
8270 GREENSBORO DRIVE
MCLEAN, VA 22102
(860) 873-1737

CONCRETE INNOVATION SERVICES
4212 LAFAYETTE CENTER DRIVE SUITE 1-A
CHANTILLY, VA 20151
(703) 222-9702

CONCRETE SOLUTIONS, INC.
3300 BEE CAVE ROAD, SUITE 650
AUSTIN, TX 78746
(512) 327-8481

STRUCTURAL STEEL NOTES

1. ALL STRUCTURAL STEEL (LOW ALLOY) POSTS, CONNECTION PLATES, AND MISC. HARDWARE SHALL CONFORM TO AASHTO M270, GRADE 50, Fy = 50,000 PSI, AND SHALL BE HOT DIPPED GALVANIZED.
2. THE CONTRACTOR SHALL TAKE THE PROPER PRECAUTIONS DURING CONSTRUCTION TO INSURE THE STABILITY OF ALL STRUCTURAL ELEMENTS UNTIL THE TOTAL STRUCTURE IS IN PLACE.
3. LENGTH DIMENSIONS ARE HORIZONTAL.
4. THE W12X87 STEEL POSTS SHALL BE USED WITHIN THE LIMITS OF THE NOISE BARRIER WALL ONLY. THE W12X210 STEEL POSTS SHALL BE USED WITHIN THE LIMITS OF THE NOISE BARRIER WALL AND RETAINING WALL 102 COMBINED.

REV.	DATE	REVISION DESCRIPTION	SHEET NO.
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Plotted Date: 6/11/2014

DESIGNER/DRAFTER: D. SCHMALTZ
CHECKED BY: R. SALEH
SCALE AS NOTED

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: ...\SB_MSH_036_179_GEN.dgn

SIGNATURE/ BLOCK:

DESIGNED BY:
LUCHS CONSULTING ENGINEERS, LLC
89 COLONY STREET
MERIDEN, CT 06451

PROJECT TITLE:
ROUTE 8
INTERCHANGE 18
NEW NORTHBOUND ON-RAMP

TOWN: ANSONIA AND DERBY

DRAWING TITLE: NOISE BARRIER WALL & WALL 102 GENERAL NOTES

PROJECT NO. 36-179
DRAWING NO. S-21
SHEET NO. 05.22

Driller: Jaime Lloret	**Connecticut DOT Boring Report**		Hole No.: AB-18
Inspector: R. Beniwal	Town: Ansonia		Stat./Offset: 21+99/15.43 LT
Soil Engr: Applied Earth Tech.	Project No.: 36-176		Northing: 905960.6
Start Date: 12-11-13	Location: Route 8		Easting: 685627.59
Finish Date: 12-11-13	Bridge No.:		Surface Elevation: 113.9
Project Description: Route 8 Ramp 18 North			Prime Engineer: Decalo & Doll
Casing Size/Type: 3.25 in HA	Sampler Type/Size: SS 2.0 in		Core Barrel Type: NX diamond
Hammer Wt.: Fall:	Hammer Wt.: 140 lbs Fall: 30 in ROPE		Boring Co: Associate Borings CO.
Groundwater Observations: @Water at 15 feet after coring water at 21 feet after 1 hours			

Depth (ft)	Sample Type/No.	Blows on Sampler per 6 inches	Pen. (in.)	Rec. (in.)	RQD %	Generalized Strata Description	Material Description and Notes	Elevation (ft)
0	S-1	11 13 17 12	24	8		ASPHALT	6 in asphalt .	
						BRN FC SAND SOME FC GRAVEL, LTL SILT, FILL	Brown fine coarse SAND, some fine coarse gravel, little silt, occasional cobbles, fill.	110
5	S-2	13 50	12	8			Brown fine coarse SAND, some fine coarse gravel, little silt, occasional cobbles, fill.	
10	S-3	1 5 6 8	24	12		BRN F SAND & SILT	Brown fine sand and silt, trace organics.	105
	S-4	9 11 9 12	24	10			Brown fine sand and silt, trace organics.	
15	S-5	8 10 10 12	24	14		BRN FC SAND SOME SILT	Brown fine coarse SAND, some silt.	100
20	S-6	4 4 6 9	24	21			Brown fine coarse SAND, some silt.	95
25	S-7	2 5 9 10	24	14		GRY BRN F SAND & SILT	Gray brown fine SAND and silt, laminations.	90
30	S-7	7 8 13 14	24	24		GRY BRN FC SAND LTL SILT	Gray brown fine coarse SAND, little silt.	85
35	C-1		60	40	20	GRY SCHIST	Gray slightly weathered, medium grained interlayered SCHIST and granofels.	80
40							END OF BORING 40ft	75

Sample Type: S = Split Spoon C = Core UP = Undisturbed Piston V = Vane Shear Test
Proportions Used: Trace = 1 - 10%, Little = 10 - 20%, Some = 20 - 35%, And = 35 - 50%

Total Penetration in Earth: 35ft Rock: 5ft	NOTES: CME 55 Truck Mounted Rig was used.	Sheet 1 of 1
No. of Soil Samples: 8 No. of Core Runs: 1		SM-001-AETrev.9/09

Driller: Jaime Lloret	**Connecticut DOT Boring Report**		Hole No.: AB-19
Inspector: R. Beniwal	Town: Ansonia		Stat./Offset: 23+90/5.84 LT
Soil Engr: Applied Earth Tech.	Project No.: 36-176		Northing: 905928.72
Start Date: 12-11-13	Location: Route 8		Easting: 685815.87
Finish Date: 12-12-13	Bridge No.:		Surface Elevation: 113.8
Project Description: Route 8 Ramp 18 North			Prime Engineer: Decalo & Doll
Casing Size/Type: 3.25 in HA	Sampler Type/Size: SS 2.0 in		Core Barrel Type: NX
Hammer Wt.: Fall:	Hammer Wt.: 140 lbs Fall: 30 in ROPE		Boring Co: Associate Borings CO.
Groundwater Observations: @water at 19 feet			

Depth (ft)	Sample Type/No.	Blows on Sampler per 6 inches	Pen. (in.)	Rec. (in.)	RQD %	Generalized Strata Description	Material Description and Notes	Elevation (ft)
0	S-1	15 24 18 22	24	8		ASPHALT	6 in asphalt.	
						BRN FC SAND SOME FC GRAVEL, LTL SILT, FILL	Brown fine coarse SAND, some fine coares gravel, little silt, occasional cobbles, fill.	110
5	S-2	10 35 50/2"	14	8			Brown fine coarse SAND, some fine coares gravel, little silt, occasional cobbles and boulders, fill.	
10	S-3	3 4 4 5	24	9		BRN ORGANIC F SAND & SILT	Brown organic fine sand and silt.	105
15	S-4	2 5 8 9	24	12		BRN F SAND SOME SILT	Brown fine SAND some silt.	100
20	S-6	2 7 17 20	24	11		BRN FC SAND SOME SILT	Brown fine coarse SAND, some silt.	95
25	S-7	3 15 20 24	24	10			Brown fine coarse SAND, some silt.	90
30	C-1		60	22	10	GRY SCHIST	Gray weathered, medium grained interlayered SCHIST and granofels.	85
35	C-2		60	27	23		Gray slightly weathered, medium grained interlayered SCHIST and granofels.	80
40							END OF BORING 38ft	75

Sample Type: S = Split Spoon C = Core UP = Undisturbed Piston V = Vane Shear Test
Proportions Used: Trace = 1 - 10%, Little = 10 - 20%, Some = 20 - 35%, And = 35 - 50%

Total Penetration in Earth: 28ft Rock: 10ft	NOTES: CME 55 Truck Mounted Rig was used.	Sheet 1 of 1
No. of Soil Samples: 6 No. of Core Runs: 2		SM-001-AETrev.9/09

Driller: Jaime Lloret	**Connecticut DOT Boring Report**		Hole No.: AB-20
Inspector: R. Beniwal	Town: Ansonia		Stat./Offset: 25+78/4.37RT
Soil Engr: Applied Earth Tech.	Project No.: 36-176		Northing: 905892.95
Start Date: 12-12-13	Location: Route 8		Easting: 686000.53
Finish Date: 12-12-13	Bridge No.:		Surface Elevation: 116.2
Project Description: Route 8 Ramp 18 North			Prime Engineer: Decalo & Doll
Casing Size/Type: 3.25 in HA	Sampler Type/Size: SS 2.0 in		Core Barrel Type: NX diamond
Hammer Wt.: Fall:	Hammer Wt.: 140 lbs Fall: 30 in ROPE		Boring Co: Associate Borings CO.
Groundwater Observations: @Water at 20 feet			

Depth (ft)	Sample Type/No.	Blows on Sampler per 6 inches	Pen. (in.)	Rec. (in.)	RQD %	Generalized Strata Description	Material Description and Notes	Elevation (ft)
0	S-1	24 17 14 15	18	10		ASPHALT	6 in asphalt.	
						GRY BROWN FC SAND & FC GRAVEL LTL SILT FILL	Brown fine coarse SAND, some fine coarse gravel, little silt, occasional cobbles, fill.	115
5	S-2	24 26 29 22	24	4			Brown fine coarse SAND, some fine coarse gravel, little silt, occasional cobbles, fill.	110
10	S-3	12 32 15 15	24	12			Gray brown fine coarse SAND, some coarse fine gravel, little silt, occasional cobbles, fill.	105
						BLK ORGANIC F SAND & SILT	Black organic fine SAND and silt	
15	S-4	2 3 10 11	24	18		BRN FC SAND & SILT	Brown fine coarse SAND and silt	100
20	S-5	4 6 10 12	24	0		BRN F SAND & SILT	Brown fine SAND and silt	95
25	S-6	1 2 4 6	24	24			Brown fine SAND and silt, trace silt, laminations.	90
30	S-7	6 13 18 32	24	6		BRN FC SAND SOME FC GRAVEL	Brown fine coarse SAND, some to little fine coarse gravel, trace silt.	85
35	S-8	1 7 21 20	24	6			Brown fine coarse SAND, some to little fine coarse gravel, trace silt.	80
40								

Sample Type: S = Split Spoon C = Core UP = Undisturbed Piston V = Vane Shear Test
Proportions Used: Trace = 1 - 10%, Little = 10 - 20%, Some = 20 - 35%, And = 35 - 50%

Total Penetration in Earth: 43.5ft Rock: 5ft	NOTES: CME 55 Truck Mounted Rig was used.	Sheet 1 of 2
No. of Soil Samples: 9 No. of Core Runs: 1		SM-001-AETrev.9/09

REV.	DATE	REVISION DESCRIPTION	SHEET NO.
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Plotted Date: 5/5/2014

DESIGNER/DRAFTER: **D. SCHMALTZ**
CHECKED BY: **R. SALEH**

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: ...\SB_MSH_036_179_BOR1.dgn

SIGNATURE/ BLOCK:

DESIGNED BY:
LUCHS CONSULTING ENGINEERS, LLC
89 COLONY STREET
MERIDEN, CT 06451

PROJECT TITLE:
ROUTE 8
INTERCHANGE 18
NEW NORTHBOUND ON-RAMP

TOWN: **ANSONIA AND DERBY**

DRAWING TITLE: **NOISE BARRIER WALL AND WALL 102 BORING LOGS 1**

PROJECT NO. **36-179**
DRAWING NO. **S-22**
SHEET NO. **05.23**

Driller: Jaime Lloret	**Connecticut DOT Boring Report**		Hole No.: AB-20
Inspector: R. Beniwal	Town: Ansonia		Stat./Offset: 25+78/4.37RT
Soil Engr: Applied Earth Tech.	Project No.: 36-176		Northing: 905892.95
Start Date: 12-12-13	Location: Route 8		Easting: 686000.53
Finish Date: 12-12-13	Bridge No.:		Surface Elevation: 116.2
Project Description: Route 8 Ramp 18 North			Prime Engineer: Decalo & Doll
Casing Size/Type: 3.25 in HA	Sampler Type/Size: SS 2.0 in		Core Barrel Type: NX diamond
Hammer Wt.: Fall:	Hammer Wt.: 140 lbs Fall: 30 in ROPE		Boring Co: Associate Borings CO.
Groundwater Observations: @Water at 20 feet			

Depth (ft)	Sample Type/No.	Blows on Sampler per 6 inches	Pen. (in.)	Rec. (in.)	RQD %	Generalized Strata Description	Material Description and Notes	Elevation (ft)
40	S-9	10 14 28 19	24	9			Brown fine coarse SAND, little fine coarse gravel, trace silt.	75
45	C-1		60	22	15	GRY SCHIST	Gray slightly weathered, medium grained interlayered SCHIST and granofels.	70
50							END OF BORING 48.5ft	65
55								60
60								55
65								50
70								45
75								40
80								

Sample Type: S = Split Spoon C = Core UP = Undisturbed Piston V = Vane Shear Test
Proportions Used: Trace = 1 - 10%, Little = 10 - 20%, Some = 20 - 35%, And = 35 - 50%

Total Penetration in	NOTES: CME 55 Truck Mounted Rig was used.	Sheet
Earth: 43.5ft Rock: 5ft		2 of 2
No. of Soil Samples: 9 No. of Core Runs: 1		SM-001-AETrev.0/00

Driller: Jaime Lloret	**Connecticut DOT Boring Report**		Hole No.: AB-21
Inspector: R. Beniwal	Town: Ansonia		Stat./Offset: 27+60/6.29 RT
Soil Engr: Applied Earth Tech.	Project No.: 36-176		Northing: 905850.32
Start Date: 12-13-13	Location: Route 8		Easting: 686177.81
Finish Date: 12-13-13	Bridge No.:		Surface Elevation: 119.9
Project Description: Route 8 Ramp 18 North			Prime Engineer: Decalo & Doll
Casing Size/Type: 3.25 in HA	Sampler Type/Size: SS 2.0 in		Core Barrel Type:
Hammer Wt.: Fall:	Hammer Wt.: 140 lbs Fall: 30 in ROPE		Boring Co: Associate Borings CO.
Groundwater Observations: @Water at 25 feet			

Depth (ft)	Sample Type/No.	Blows on Sampler per 6 inches	Pen. (in.)	Rec. (in.)	RQD %	Generalized Strata Description	Material Description and Notes	Elevation (ft)
0						ASPHALT	6 in asphalt	
5	S-1	18 20 16 25	24	8		GRY BROWN FC SAND & FC GRAVEL LTL SILT, BOULDERS, FILL	Brown fine coarse SAND and fine coarse gravel, trace to little silt, occasional cobbles, fill	115
10	S-2	5 15 20 15	24	8			Gray brown fine coarse SAND, and fine coarse gravel, occasional cobbles and boulders.	110
15							Boulders at 8 and 12 feet	105
20	S-3	7 14 36 31	24	10			Gray brown fine coarse SAND, and fine coarse gravel, occasional cobbles and boulders.	100
25	S-4	2 5 8 13	24	14		GRY F SAND & SILT	Gray fine SAND and silt, trace organic at 19 feet.	95
30	S-5	14 17 13 14	24	18			Gray fine SAND and silt.	90
35	S-6	3 5 4 4	24	24		GRY BRN F SAND SOME SILT	Brown fine SAND, little to some silt, laminations.	85
40	S-7	1 4 6 6	24	18			Brown fine SAND, little to some silt, laminations.	80
							Gray fine SAND, little to some silt, trace clay.	

Sample Type: S = Split Spoon C = Core UP = Undisturbed Piston V = Vane Shear Test
Proportions Used: Trace = 1 - 10%, Little = 10 - 20%, Some = 20 - 35%, And = 35 - 50%

Total Penetration in	NOTES: CME 55 Truck Mounted Rig was used.	Sheet
Earth: 62ft Rock: 0ft		1 of 2
No. of Soil Samples: 12 No. of Core Runs: 0		SM-001-AETrev.0/00

Driller: Jaime Lloret	**Connecticut DOT Boring Report**		Hole No.: AB-21
Inspector: R. Beniwal	Town: Ansonia		Stat./Offset: 27+60/6.29 RT
Soil Engr: Applied Earth Tech.	Project No.: 36-176		Northing: 905850.32
Start Date: 12-13-13	Location: Route 8		Easting: 686177.81
Finish Date: 12-13-13	Bridge No.:		Surface Elevation: 119.9
Project Description: Route 8 Ramp 18 North			Prime Engineer: Decalo & Doll
Casing Size/Type: 3.25 in HA	Sampler Type/Size: SS 2.0 in		Core Barrel Type:
Hammer Wt.: Fall:	Hammer Wt.: 140 lbs Fall: 30 in ROPE		Boring Co: Associate Borings CO.
Groundwater Observations: @Water at 25 feet			

Depth (ft)	Sample Type/No.	Blows on Sampler per 6 inches	Pen. (in.)	Rec. (in.)	RQD %	Generalized Strata Description	Material Description and Notes	Elevation (ft)
40	S-8	2 3 5 5	24	24		GRY BRN F SAND SOME SILT *(con't)*	Gray fine SAND, little to some silt, trace clay.	
45	S-9	3 5 15 41	24	24			Gray fine SAND, little to some silt, trace clay.	75
50	S-10	12 15 12 21	24	12		BRN FC SAND & FC GRAVEL	Brown fine coarse SAND and fine coarse gravel, trace silt.	70
55	S-11	7 10 13 20	24	8			Brown fine coarse SAND and fine coarse gravel, trace silt.	65
60	S-12	10 11 40 75	24	6			Brown fine coarse SAND and fine coarse gravel, trace silt.	60
65							END OF BORING 62ft	55
70								50
75								45
80								40

Sample Type: S = Split Spoon C = Core UP = Undisturbed Piston V = Vane Shear Test
Proportions Used: Trace = 1 - 10%, Little = 10 - 20%, Some = 20 - 35%, And = 35 - 50%

Total Penetration in	NOTES: CME 55 Truck Mounted Rig was used.	Sheet
Earth: 62ft Rock: 0ft		2 of 2
No. of Soil Samples: 12 No. of Core Runs: 0		SM-001-AETrev.0/00

REV.	DATE	REVISION DESCRIPTION	SHEET NO.
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Plotted Date: 5/5/2014

DESIGNER/DRAFTER: **D. SCHMALTZ**
CHECKED BY: **R. SALEH**

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: ...\SB..MSH..036..179..BOR2.dgn

SIGNATURE/ BLOCK:

DESIGNED BY:
LUCHS CONSULTING ENGINEERS, LLC
89 COLONY STREET
MERIDEN, CT 06451

PROJECT TITLE:
ROUTE 8
INTERCHANGE 18
NEW NORTHBOUND ON-RAMP

TOWN: **ANSONIA AND DERBY**

DRAWING TITLE:
NOISE BARRIER WALL AND WALL 102 BORING LOGS 2

PROJECT NO. **36-179**
DRAWING NO. **S-23**
SHEET NO. **05.24**

Driller: Jaime Lloret	**Connecticut DOT Boring Report**	Hole No.: AB-22
Inspector: R. Beniwal	Town: Ansonia	Stat./Offset: 29+47/6.47 RT
Soil Engr: Applied Earth Tech.	Project No.: 36-176	Northing: 905804.76
Start Date: 12-18-13	Location: Route 8	Easting: 686359.48
Finish Date: 12-18-13	Bridge No.:	Surface Elevation: 124.4
Project Description: Route 8 Ramp 18 North		Prime Engineer: Decalo & Doll
Casing Size/Type: 3.25 in HA	Sampler Type/Size: SS 2.0 in	Core Barrel Type:
Hammer Wt.: Fall:	Hammer Wt.: 140 lbs Fall: 30 in ROPE	Boring Co: Associate Borings CO.
Groundwater Observations: @Water at 25 feet		

Depth (ft)	Sample Type/No.	Blows on Sampler per 6 inches	Pen. (in.)	Rec. (in.)	RQD %	Generalized Strata Description	Material Description and Notes	Elevation (ft)
0						ASPHALT OVER TRAPROCK / GRY BRN FC SAND & FC GRAVEL LTL SILT, BOULDERS, FILL	6 in asphalt over 14 in traprock	
	S-1	16 19 15	18	8			Brown fine coarse SAND and fine coarse gravel, trace to little silt, occasional cobbles, fill	120
5	S-2	12 9 11 19	24	3			Brown fine coarse SAND and fine coarse gravel, trace to little silt, occasional cobbles, fill	
10	S-3	13 14 11 15	24	4			Gray brown fine coarse SAND, and fine coarse gravel, occasional cobbles and boulders.	115
15	S-4	5 23 32 14	24	9			Gray brown fine coarse SAND, and fine coarse gravel, occasional cobbles and boulders.	110
20	S-5	12 5 4 4	24	8		GRY BLK ORGANIC F SAND & SILT	Gray black organic fine SAND and silt.	105
	S-6	5 4 3 4	24	10			Gray black organic fine SAND and silt.	
25	S-7	3 3 1 1	24	6		GRY BRN F SAND & SILT	Gray fine SAND and silt	100
30	S-8	3 4 2 7	24	24			Gray fine SAND and silt	95
35	S-9	2 5 6 7	24	12			Gray brown fine SAND, and to some silt, trace clay, laminations.	90
40								85

Sample Type: S = Split Spoon C = Core UP = Undisturbed Piston V = Vane Shear Test
Proportions Used: Trace = 1 - 10%, Little = 10 - 20%, Some = 20 - 35%, And = 35 - 50%

Total Penetration in	NOTES: CME 55 Truck Mounted Rig was used.	Sheet 1 of 2
Earth: 62ft Rock: 0ft		
No. of Soil Samples: 14 No. of Core Runs: 0		SM-001-AETrev.0/09

Driller: Jaime Lloret	**Connecticut DOT Boring Report**	Hole No.: AB-22
Inspector: R. Beniwal	Town: Ansonia	Stat./Offset: 29+47/6.47 RT
Soil Engr: Applied Earth Tech.	Project No.: 36-176	Northing: 905804.76
Start Date: 12-18-13	Location: Route 8	Easting: 686359.48
Finish Date: 12-18-13	Bridge No.:	Surface Elevation: 124.4
Project Description: Route 8 Ramp 18 North		Prime Engineer: Decalo & Doll
Casing Size/Type: 3.25 in HA	Sampler Type/Size: SS 2.0 in	Core Barrel Type:
Hammer Wt.: Fall:	Hammer Wt.: 140 lbs Fall: 30 in ROPE	Boring Co: Associate Borings CO.
Groundwater Observations: @Water at 25 feet		

Depth (ft)	Sample Type/No.	Blows on Sampler per 6 inches	Pen. (in.)	Rec. (in.)	RQD %	Generalized Strata Description	Material Description and Notes	Elevation (ft)
40	S-10	2 5 6 10	24	24		GRY BRN F SAND & SILT *(con't)*	Gray brown fine SAND, and to some silt, trace clay, laminations.	
45	S-11	6 19 30 19	24	24		BRN FC SAND & FC GRAVEL LTL SILT	Brown fine coarse SAND and fine coarse gravel, little silt.	80
50	S-12	19 30 29 31	24	12			Brown fine coarse SAND and fine coarse gravel, little silt.	75
55	S-13	3 10 16 36	24	12			Brown fine coarse SAND and fine coarse gravel, little silt.	70
60	S-14	16 9 19 42	24	12			Brown fine coarse SAND and fine coarse gravel, little silt.	65
65							END OF BORING 62ft	60
70								55
75								50
80								45

Sample Type: S = Split Spoon C = Core UP = Undisturbed Piston V = Vane Shear Test
Proportions Used: Trace = 1 - 10%, Little = 10 - 20%, Some = 20 - 35%, And = 35 - 50%

Total Penetration in	NOTES: CME 55 Truck Mounted Rig was used.	Sheet 2 of 2
Earth: 62ft Rock: 0ft		
No. of Soil Samples: 14 No. of Core Runs: 0		SM-001-AETrev.0/09

Driller: Jaime Lloret	**Connecticut DOT Boring Report**	Hole No.: AB-23
Inspector: R. Beniwal	Town: Ansonia	Stat./Offset: 31+33/6.44 RT
Soil Engr: Applied Earth Tech.	Project No.: 36-176	Northing: 905759.25
Start Date: 12-19-13	Location: Route 8	Easting: 686540.04
Finish Date: 12-19-13	Bridge No.:	Surface Elevation: 125.5
Project Description: Route 8 Ramp 18 North		Prime Engineer: Decalo & Doll
Casing Size/Type: 3.25 in HA	Sampler Type/Size: SS 2.0 in	Core Barrel Type:
Hammer Wt.: Fall:	Hammer Wt.: 140 lbs Fall: 30 in ROPE	Boring Co: Associate Borings CO.
Groundwater Observations: @no water		

Depth (ft)	Sample Type/No.	Blows on Sampler per 6 inches	Pen. (in.)	Rec. (in.)	RQD %	Generalized Strata Description	Material Description and Notes	Elevation (ft)
0						ASPHALT / BRN FC SAND & FC GRAVEL LTL SILT BOULDERS, FILL	5 in asphalt	
	S-1	12 18 18 21	24	8			Brown fine coarse SAND and fine coarse gravel, trace to little silt, occasional cobbles, fill	125
5	S-2	3 3 6 16	24	3			Brown fine coarse SAND and fine coarse gravel, trace to little silt, occasional cobbles & boulders, fill	120
10								115
15							END OF BORING 11ft	110
20								105
25								100
30								95
35								90
40								

Sample Type: S = Split Spoon C = Core UP = Undisturbed Piston V = Vane Shear Test
Proportions Used: Trace = 1 - 10%, Little = 10 - 20%, Some = 20 - 35%, And = 35 - 50%

Total Penetration in	NOTES: CME 55 Truck Mounted Rig was used.	Sheet 1 of 1
Earth: 11ft Rock: 0ft		
No. of Soil Samples: 2 No. of Core Runs: 0		SM-001-AETrev.0/09

REV.	DATE	REVISION DESCRIPTION	SHEET NO.
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Plotted Date: 5/5/2014

DESIGNER/DRAFTER: **D. SCHMALTZ**
CHECKED BY: **R. SALEH**

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: ...\SB_MSH_036_179_BOR3.dgn

SIGNATURE/ BLOCK:

DESIGNED BY:
LUCHS CONSULTING ENGINEERS, LLC
89 COLONY STREET
MERIDEN, CT 06451

PROJECT TITLE:
ROUTE 8
INTERCHANGE 18
NEW NORTHBOUND ON-RAMP

TOWN: **ANSONIA AND DERBY**

DRAWING TITLE:
NOISE BARRIER WALL AND WALL 102 BORING LOGS 3

PROJECT NO. **36-179**
DRAWING NO. **S-24**
SHEET NO. **05.25**

Driller: Jaime Lloret	**Connecticut DOT Boring Report**		Hole No.: AB-23A
Inspector: R. Beniwal	Town: Ansonia		Stat./Offset: 31+30.5/6.44 RT
Soil Engr: Applied Earth Tech.	Project No.: 36-176		Northing: 905759.25
Start Date: 12-19-13	Location: Route 8		Easting: 686540.04
Finish Date: 12-19-13	Bridge No.:		Surface Elevation: 125.5
Project Description: Route 8 Ramp 18 North			Prime Engineer: Decalo & Doll
Casing Size/Type: 3.25 in HA	Sampler Type/Size: SS 2.0 in		Core Barrel Type: NX
Hammer Wt.: Fall:	Hammer Wt.: 140 lbs Fall: 30 in ROPE		Boring Co: Associate Borings CO.
Groundwater Observations: @no water			

Depth (ft)	SAMPLES: Sample Type/No.	Blows on Sampler per 6 inches	Pen. (in.)	Rec. (in.)	RQD %	Generalized Strata Description	Material Description and Notes	Elevation (ft)
0						ASPHALT GRY BRN FC SAND & FC GRAVEL LTL SILT LARGE BOULDERS, FILL	5 in asphalt	125
10	S-3	12 35	23	3			Brown fine coarse SAND and fine coarse gravel, trace to little silt, occasional cobbles & boulders, fill	115
15	C-1		60	40	60		Cored boulder at 12 feet	110
	S-4	18 100/5"	11	5			Gray brown fine coarse SAND, and fine coarse gravel, occasional cobbles and boulders.	
20	C-2		60	8			Cored boulder at 18 feet.	105
25	S-5	11 13 24 22	24	4			Gray brown fine coarse SAND, and fine coarse gravel, occasional cobbles and boulders, fill.	100
							END OF BORING 25ft	
30								95
35								90
40								

Sample Type: S = Split Spoon C = Core UP = Undisturbed Piston V = Vane Shear Test
Proportions Used: Trace = 1 - 10%, Little = 10 - 20%, Some = 20 - 35%, And = 35 - 50%

Total Penetration in Earth: 20ft Rock: 5ft No. of Soil Samples: 3 No. of Core Runs: 1	NOTES: CME 55 Truck Mounted Rig was used.	Sheet 1 of 1 SM-001-AETrev.0/00

Driller: Jaime Lloret	**Connecticut DOT Boring Report**		Hole No.: AB-23B
Inspector: R. Beniwal	Town: Ansonia		Stat./Offset: 31+38.5/6.44 RT
Soil Engr: Applied Earth Tech.	Project No.: 36-176		Northing: 905759.25
Start Date: 12-19-13	Location: Route 8		Easting: 686540.04
Finish Date: 12-19-13	Bridge No.:		Surface Elevation: 125.5
Project Description: Route 8 Ramp 18 North			Prime Engineer: Decalo & Doll
Casing Size/Type: 3.25 in HA	Sampler Type/Size: SS 2.0 in		Core Barrel Type:
Hammer Wt.: Fall:	Hammer Wt.: 140 lbs Fall: 30 in ROPE		Boring Co: Associate Borings CO.
Groundwater Observations: @Water at 30 feet			

Depth (ft)	SAMPLES: Sample Type/No.	Blows on Sampler per 6 inches	Pen. (in.)	Rec. (in.)	RQD %	Generalized Strata Description	Material Description and Notes	Elevation (ft)
0						ASPHALT GRY BRN FC SAND & FC GRAVEL LTL SILT, BOULDERS, FILL	5 in asphalt	125
10							Brown fine coarse SAND and fine coarse gravel, trace to little silt, occasional cobbles & boulders, fill	115
15								110
20								105
25	S-6	31 17 3 10	24	8			Brown fine coarse SAND and fine coarse gravel, trace to little silt, occasional cobbles & boulders, fill	100
	S-7	21 26 24 32	24	18			Brown fine coarse SAND and fine coarse gravel, trace to little silt, occasional cobbles & boulders, fill	
30	S-8	7 15 13 19	24	8		GRY BRN F SAND & SILT	Brown fine SAND some silt	95
35	S-9	7 14 10 10	24	20			Brown fine SAND some silt	90
40								

Sample Type: S = Split Spoon C = Core UP = Undisturbed Piston V = Vane Shear Test
Proportions Used: Trace = 1 - 10%, Little = 10 - 20%, Some = 20 - 35%, And = 35 - 50%

Total Penetration in Earth: 62ft Rock: 0ft No. of Soil Samples: 9 No. of Core Runs: 0	NOTES: CME 55 Truck Mounted Rig was used.	Sheet 1 of 2 SM-001-AETrev.0/00

Driller: Jaime Lloret	**Connecticut DOT Boring Report**		Hole No.: AB-23B
Inspector: R. Beniwal	Town: Ansonia		Stat./Offset: 31+38.5/6.44 RT
Soil Engr: Applied Earth Tech.	Project No.: 36-176		Northing: 905759.25
Start Date: 12-19-13	Location: Route 8		Easting: 686540.04
Finish Date: 12-19-13	Bridge No.:		Surface Elevation: 125.5
Project Description: Route 8 Ramp 18 North			Prime Engineer: Decalo & Doll
Casing Size/Type: 3.25 in HA	Sampler Type/Size: SS 2.0 in		Core Barrel Type:
Hammer Wt.: Fall:	Hammer Wt.: 140 lbs Fall: 30 in ROPE		Boring Co: Associate Borings CO.
Groundwater Observations: @Water at 30 feet			

Depth (ft)	SAMPLES: Sample Type/No.	Blows on Sampler per 6 inches	Pen. (in.)	Rec. (in.)	RQD %	Generalized Strata Description	Material Description and Notes	Elevation (ft)
40	S-10	3 6 8 10	24	20		GRY BRN F SAND & SILT *(con't)*	Brown fine SAND and silt	85
45	S-11	2 6 12 15	24	24			Brown fine SAND and silt, trace clay, laminations	80
50	S-12	3 4 7 12	24	18			Gray fine SAND and silt, trace clay, laminations	75
55	S-13	3 6 10 13	24	24			Gray fine SAND and silt, trace clay, laminations	70
60	S-14	4 35 17 25	24	8		BRN FC SAND & FC GRAVEL	Brown fine coarse SAND and fine coarse gravel, trace silt.	65
							END OF BORING 62ft	
65								60
70								55
75								50
80								

Sample Type: S = Split Spoon C = Core UP = Undisturbed Piston V = Vane Shear Test
Proportions Used: Trace = 1 - 10%, Little = 10 - 20%, Some = 20 - 35%, And = 35 - 50%

Total Penetration in Earth: 62ft Rock: 0ft No. of Soil Samples: 9 No. of Core Runs: 0	NOTES: CME 55 Truck Mounted Rig was used.	Sheet 2 of 2 SM-001-AETrev.0/00

REV.	DATE	REVISION DESCRIPTION	SHEET NO.
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Plotted Date: 5/5/2014

DESIGNER/DRAFTER: **D. SCHMALTZ**
CHECKED BY: **R. SALEH**

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: ...\SB_MSH_036_179_BOR4.dgn

SIGNATURE/ BLOCK:

DESIGNED BY:
LUCHS CONSULTING ENGINEERS, LLC
89 COLONY STREET
MERIDEN, CT 06451

PROJECT TITLE:
ROUTE 8
INTERCHANGE 18
NEW NORTHBOUND ON-RAMP

TOWN: **ANSONIA AND DERBY**

DRAWING TITLE:
NOISE BARRIER WALL AND WALL 102 BORING LOGS 4

PROJECT NO. **36-179**
DRAWING NO. **S-25**
SHEET NO. **05.26**

Driller: Jaime Lloret	**Connecticut DOT Boring Report**		Hole No.: AB-24
Inspector: R. Beniwal	Town: Ansonia		Stat./Offset: 33+11/6.62 RT
Soil Engr: Applied Earth Tech.	Project No.: 36-176		Northing: 905716.03
Start Date: 12-20-13	Location: Route 8		Easting: 686711.83
Finish Date: 12-20-13	Bridge No.:		Surface Elevation: 132.7
Project Description: Route 8 Ramp 18 North			Prime Engineer: Decalo & Doll
Casing Size/Type: 3.25 in HA	Sampler Type/Size: SS 2.0 in		Core Barrel Type:
Hammer Wt.: Fall:	Hammer Wt.: 140 lbs Fall: 30 in ROPE		Boring Co: Associate Borings CO.
Groundwater Observations: @Water at 30 feet			

Depth (ft)	Sample Type/No.	Blows on Sampler per 6 inches	Pen. (in.)	Rec. (in.)	RQD %	Generalized Strata Description	Material Description and Notes	Elevation (ft)
0						ASPHALT	5 in asphalt	
	S-1	3 6 4 3	24	6		BRN FC SAND & FC GRAVEL LTL SILT BOULDERS, FILL	Brown fine coarse SAND and fine coarse gravel, trace to little silt, occasional cobbles, fill	130
5	S-2	5 7 22 22	24	4			Brown fine coarse SAND and fine coarse gravel, trace to little silt, occasional cobbles, fill	125
10	S-3	8 9 11 30	24	6			Brown fine coarse SAND and fine coarse gravel, trace to little silt, occasional cobbles, fill	120
15	S-4	3 5 25 25	24	10			Brown fine coarse SAND and fine coarse gravel, trace to little silt, occasional cobbles, fill	115
20	S-5	25 45 60 4	18	4			Brown fine coarse SAND and fine coarse gravel, trace to little silt, occasional cobbles & boulders, fill	110
25	S-6	3 11 16 30	24	6			Brown fine coarse SAND and fine coarse gravel, trace to little silt, occasional cobbles & boulders, fill	105
	S-7	40 50	24	6			Brown fine coarse SAND and fine coarse gravel, trace to little silt, occasional cobbles & boulders, fill	
30	S-8	6 13 14 20	24	12			Brown fine coarse SAND and fine coarse gravel, trace to little silt, occasional cobbles, fill	100
35	S-9	6 7 6 9	24	14		GRY BRN F SAND & SILT	Gray brown fine SAND, and to some silt, trace clay, laminations.	95
40								

Sample Type: S = Split Spoon C = Core UP = Undisturbed Piston V = Vane Shear Test
Proportions Used: Trace = 1 - 10%, Little = 10 - 20%, Some = 20 - 35%, And = 35 - 50%

Total Penetration in Earth: 67ft Rock: 0ft	NOTES: CME 55 Truck Mounted Rig was used.	Sheet 1 of 2
No. of Soil Samples: 15 No. of Core Runs: 0		SM-001-AETrev.0/09

Driller: Jaime Lloret	**Connecticut DOT Boring Report**		Hole No.: AB-24
Inspector: R. Beniwal	Town: Ansonia		Stat./Offset: 33+11/6.62 RT
Soil Engr: Applied Earth Tech.	Project No.: 36-176		Northing: 905716.03
Start Date: 12-20-13	Location: Route 8		Easting: 686711.83
Finish Date: 12-20-13	Bridge No.:		Surface Elevation: 132.7
Project Description: Route 8 Ramp 18 North			Prime Engineer: Decalo & Doll
Casing Size/Type: 3.25 in HA	Sampler Type/Size: SS 2.0 in		Core Barrel Type:
Hammer Wt.: Fall:	Hammer Wt.: 140 lbs Fall: 30 in ROPE		Boring Co: Associate Borings CO.
Groundwater Observations: @Water at 30 feet			

Depth (ft)	Sample Type/No.	Blows on Sampler per 6 inches	Pen. (in.)	Rec. (in.)	RQD %	Generalized Strata Description	Material Description and Notes	Elevation (ft)
40	S-10	1 6 3 5	24	10		GRY BRN F SAND & SILT *(con't)*	Gray brown fine SAND, and to some silt, trace clay, laminations.	90
45	S-11	2 4 3 7	24	18			Gray brown fine SAND, and to some silt, trace clay.	85
50	S-12	3 4 6 10	24	24			Gray brown fine SAND, and to some silt, trace clay.	80
55	S-13	2 3 6 8	24	18			Gray brown fine SAND, and to some silt, trace clay.	75
60	S-14	5 4 11 14	24	14			Gray brown fine SAND, and to some silt, trace clay.	70
65	S-15	15 30 27 24	24	10		BRN FC SAND & FC GRAVEL LTL SILT	Red brown fine coarse SAND and fine coarse gravel, little silt.	65
70							END OF BORING 67ft	60
75								55
80								

Sample Type: S = Split Spoon C = Core UP = Undisturbed Piston V = Vane Shear Test
Proportions Used: Trace = 1 - 10%, Little = 10 - 20%, Some = 20 - 35%, And = 35 - 50%

Total Penetration in Earth: 67ft Rock: 0ft	NOTES: CME 55 Truck Mounted Rig was used.	Sheet 2 of 2
No. of Soil Samples: 15 No. of Core Runs: 0		SM-001-AETrev.0/09

REV.	DATE	REVISION DESCRIPTION	SHEET NO.
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Plotted Date: 5/5/2014

DESIGNER/DRAFTER: D. SCHMALTZ
CHECKED BY: R. SALEH

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: ...\SB_MSH_036_179_BOR5.dgn

SIGNATURE/ BLOCK:

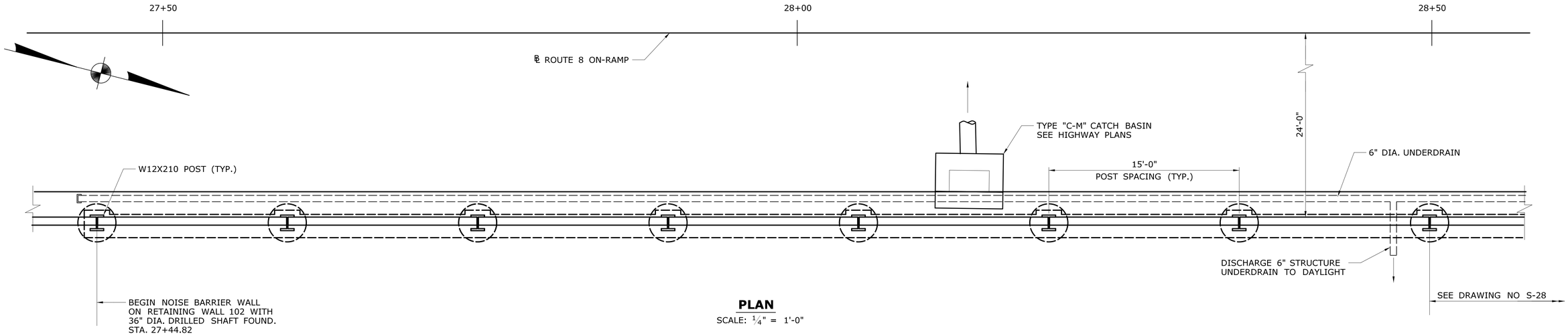
DESIGNED BY:
LUCHS CONSULTING ENGINEERS, LLC
89 COLONY STREET
MERIDEN, CT 06451

PROJECT TITLE:
ROUTE 8
INTERCHANGE 18
NEW NORTHBOUND ON-RAMP

TOWN: ANSONIA AND DERBY

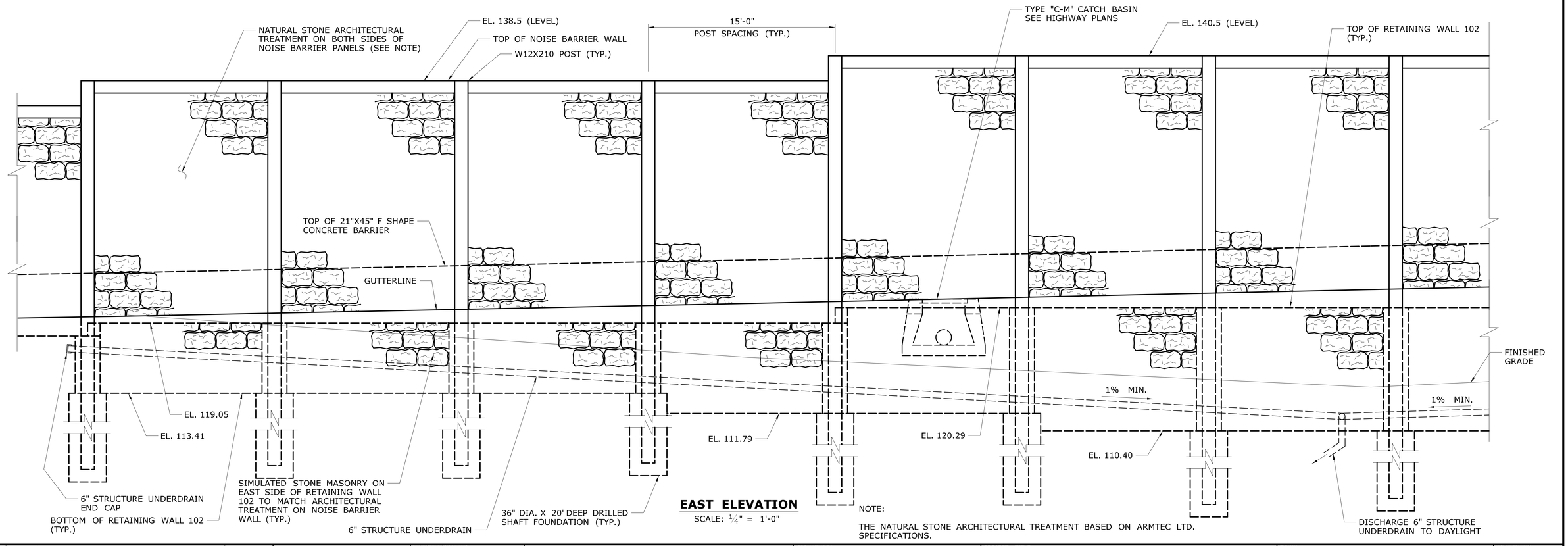
DRAWING TITLE: NOISE BARRIER WALL AND WALL 102 BORING LOGS 5

PROJECT NO. 36-179
DRAWING NO. S-26
SHEET NO. 05.27



PLAN

SCALE: 1/4" = 1'-0"



EAST ELEVATION

SCALE: 1/4" = 1'-0"

NOTE:

THE NATURAL STONE ARCHITECTURAL TREATMENT BASED ON ARMTEC LTD. SPECIFICATIONS.

REV.	DATE	REVISION DESCRIPTION	SHEET NO.
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Plotted Date: 5/5/2014

DESIGNER/DRAFTER: **D. SCHMALTZ**

CHECKED BY: **R. SALEH**

SCALE AS NOTED

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: ...\SB_MSH_036_179_PE1.dgn

SIGNATURE/ BLOCK:

DESIGNED BY:

LUCHS CONSULTING ENGINEERS, LLC
89 COLONY STREET
MERIDEN, CT 06451

PROJECT TITLE:

ROUTE 8
INTERCHANGE 18
NEW NORTHBOUND ON-RAMP

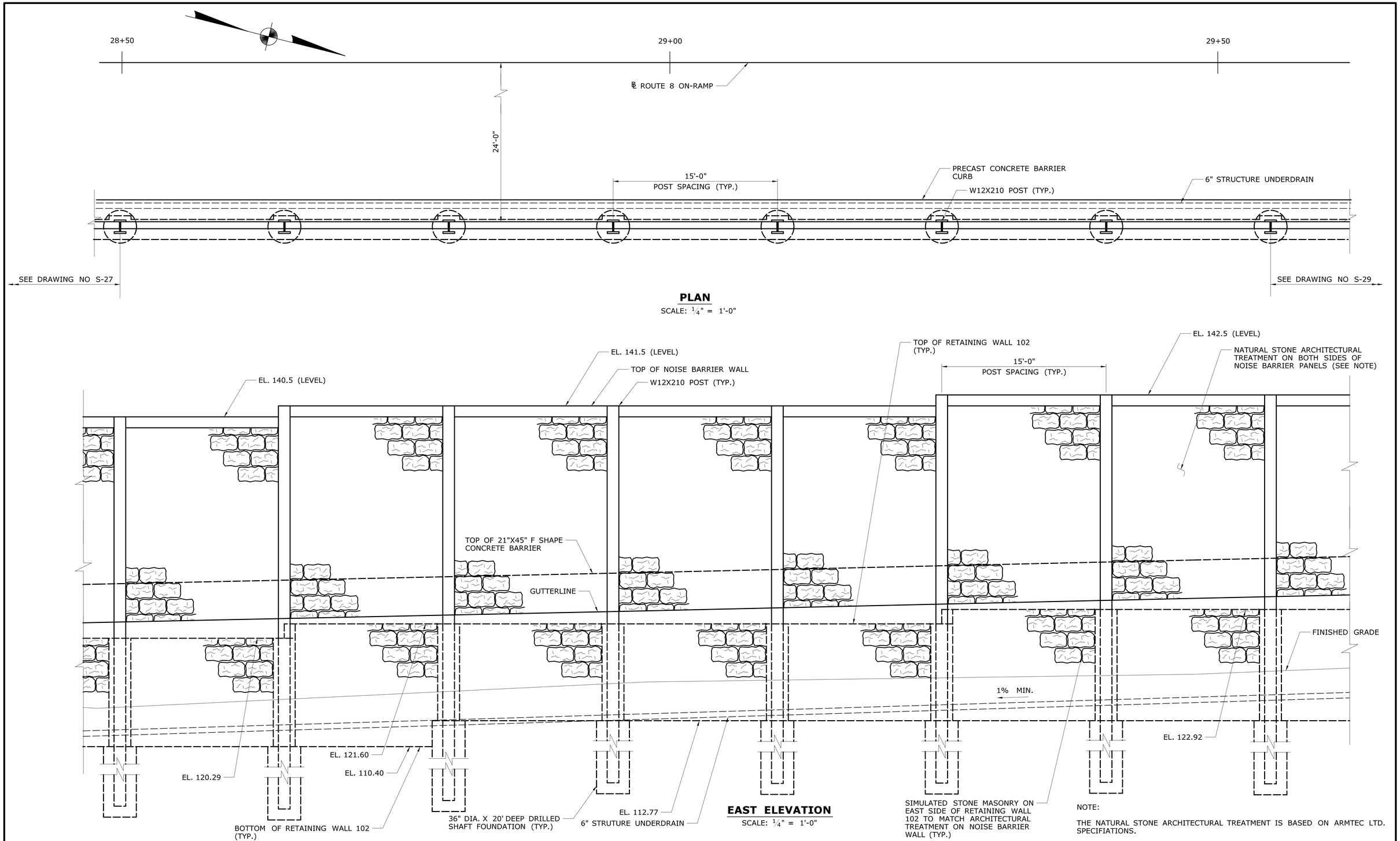
TOWN: **ANSONIA AND DERBY**

DRAWING TITLE: **NOISE BARRIER WALL AND WALL 102 PLAN & ELEVATION 1**

PROJECT NO. **36-179**

DRAWING NO. **S-27**

SHEET NO. **05.28**



PLAN

SCALE: 1/4" = 1'-0"

EAST ELEVATION

SCALE: 1/4" = 1'-0"

NOTE:

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Plotted Date: 5/5/2014

DESIGNER/DRAFTER: **D. SCHMALTZ**

CHECKED BY: **R. SALEH**

SCALE AS NOTED

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: ..\SB_MSH_036_179_PE2.dgn

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DESIGNED BY:
LUCHS CONSULTING ENGINEERS, LLC
89 COLONY STREET
MERIDEN, CT 06451

PROJECT TITLE:

ROUTE 8
INTERCHANGE 18
NEW NORTHBOUND ON-RAMP

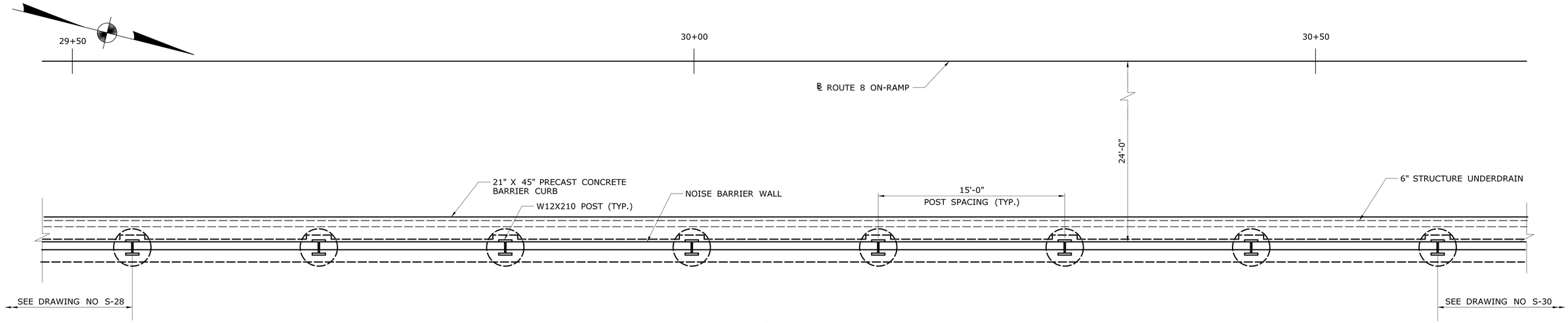
TOWN: **ANSONIA AND DERBY**

PROJECT NO. **36-179**

DRAWING NO. **S-28**

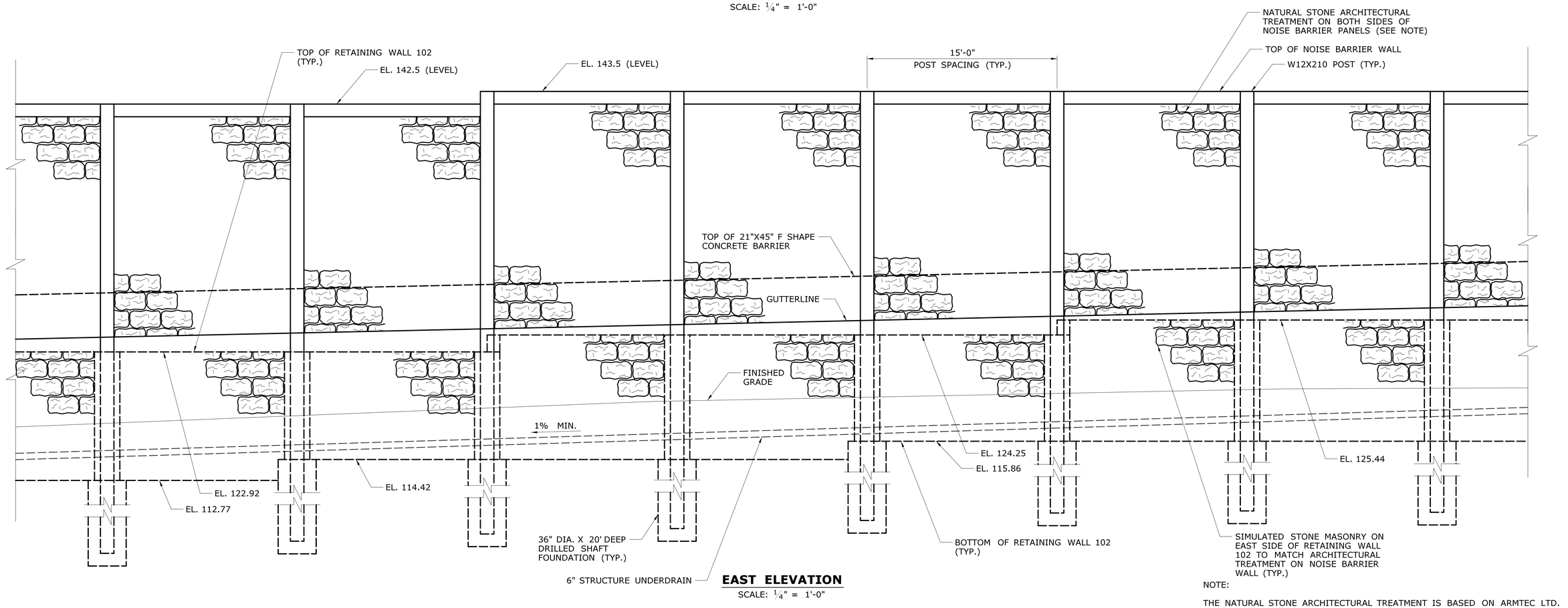
DRAWING TITLE: **NOISE BARRIER WALL AND WALL 102 PLAN & ELEVATION 2**

SHEET NO. **05.29**



PLAN

SCALE: 1/4" = 1'-0"



EAST ELEVATION

SCALE: 1/4" = 1'-0"

NOTE:

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Plotted Date: 5/5/2014

DESIGNER/DRAFTER: **D. SCHMALTZ**

CHECKED BY: **R. SALEH**

SCALE AS NOTED

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DEPARTMENT OF TRANSPORTATION

Filename: ..\SB_MSH_036_179_PE3.dgn

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LUCHS CONSULTING ENGINEERS, LLC
89 COLONY STREET
MERIDEN, CT 06451

PROJECT TITLE:
ROUTE 8
INTERCHANGE 18
NEW NORTHBOUND ON-RAMP

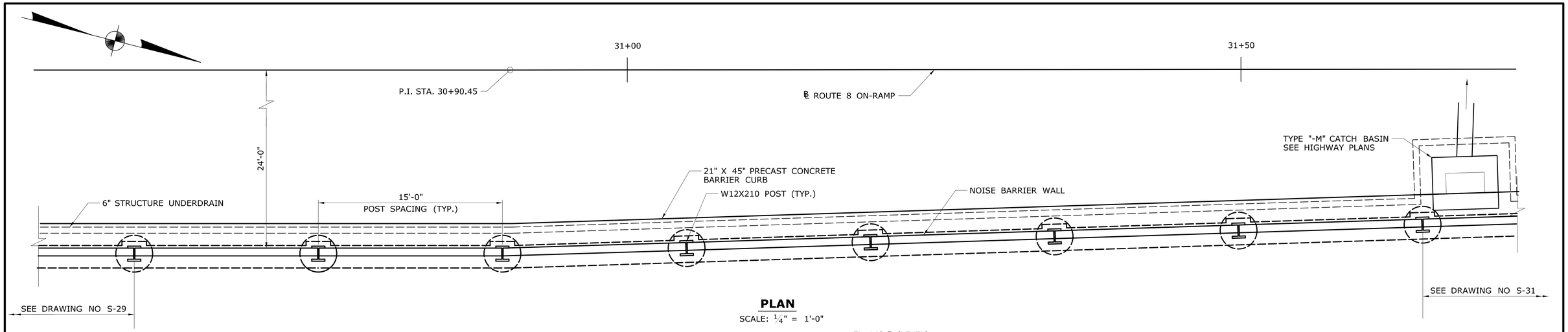
TOWN: **ANSONIA AND DERBY**

DRAWING TITLE: **NOISE BARRIER WALL AND WALL 102 PLAN & ELEVATION 3**

PROJECT NO. **36-179**

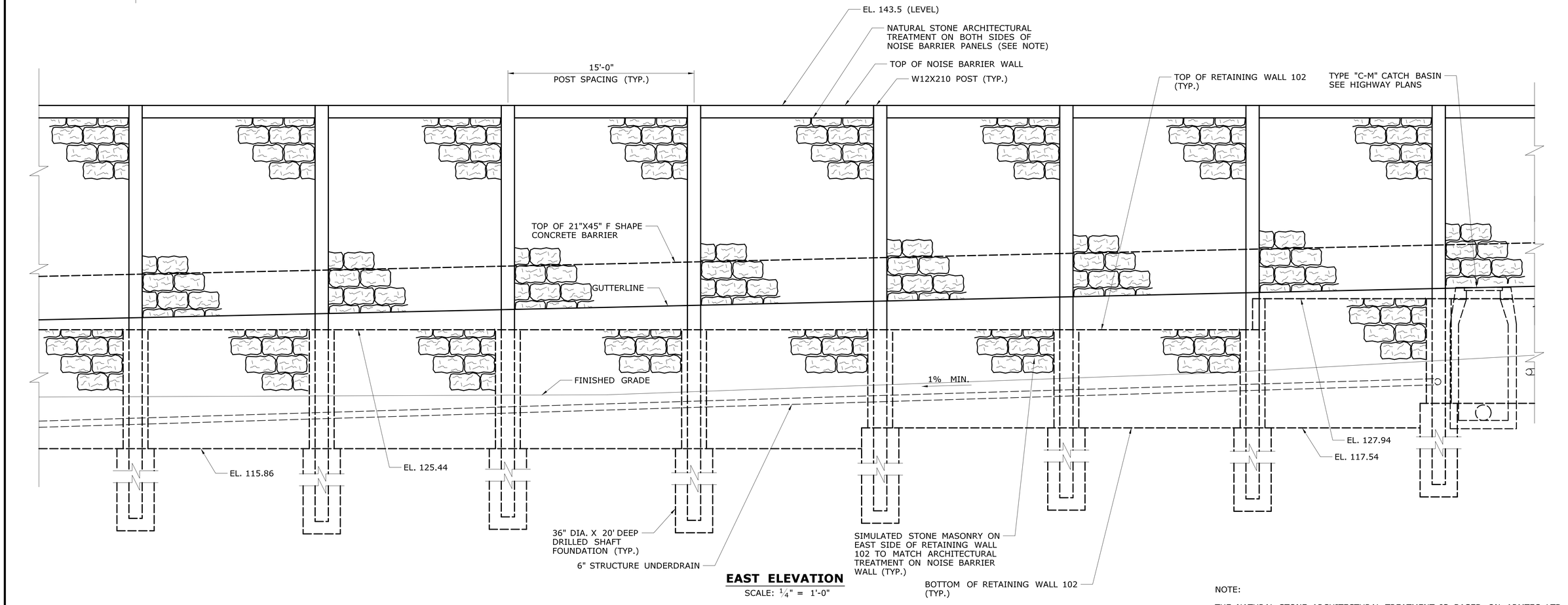
DRAWING NO. **S-29**

SHEET NO. **05.30**



PLAN

SCALE: 1/4" = 1'-0"



EAST ELEVATION

SCALE: 1/4" = 1'-0"

NOTE:

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Plotted Date: 5/5/2014

DESIGNER/DRAFTER: **D. SCHMALTZ**

CHECKED BY: **R. SALEH**

SCALE AS NOTED

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DEPARTMENT OF TRANSPORTATION

Filename: ...\SB_MSH_036_179_PE4.dgn

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DESIGNED BY:
LUCHS CONSULTING ENGINEERS, LLC
89 COLONY STREET
MERIDEN, CT 06451

PROJECT TITLE:
ROUTE 8
INTERCHANGE 18
NEW NORTHBOUND ON-RAMP

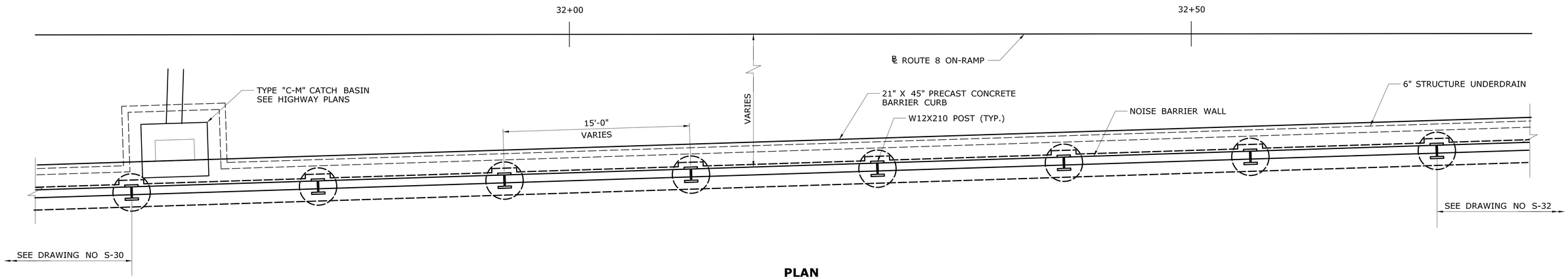
TOWN: **ANSONIA AND DERBY**

DRAWING TITLE: **NOISE BARRIER WALL AND WALL 102 PLAN & ELEVATION 4**

PROJECT NO. **36-179**

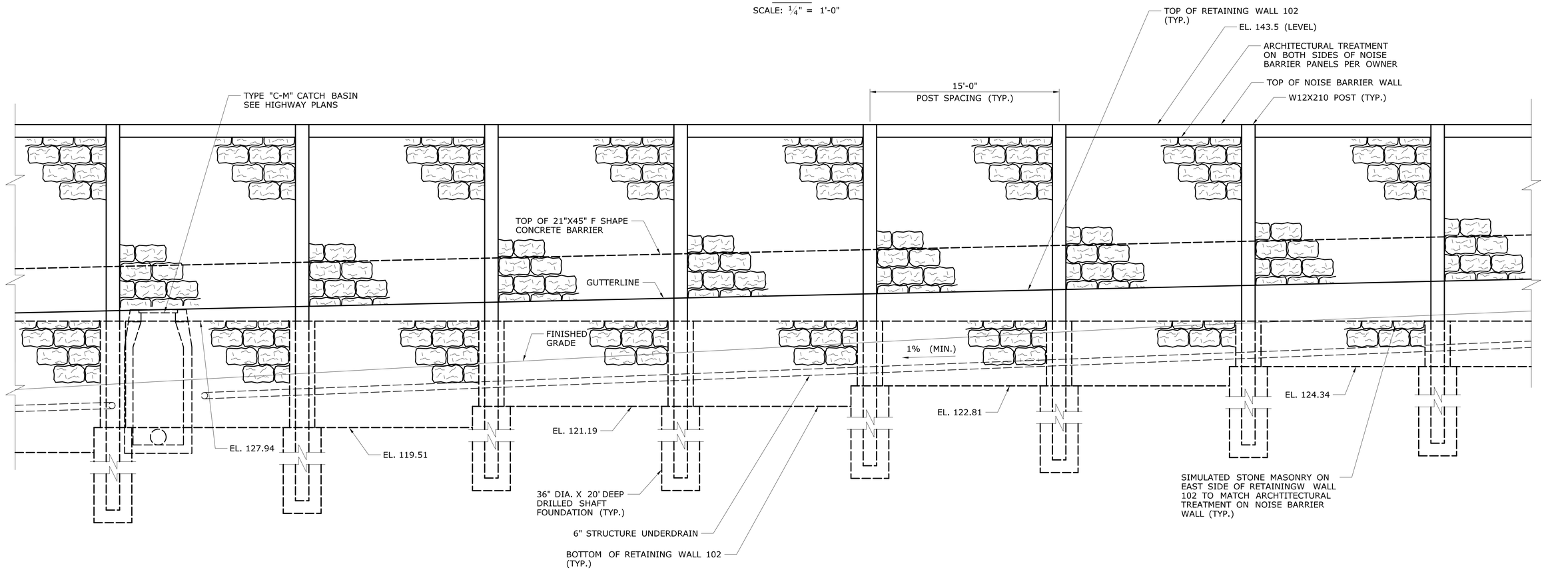
DRAWING NO. **S-30**

SHEET NO. **05.31**



PLAN

SCALE: 1/4" = 1'-0"



EAST ELEVATION

SCALE: 1/4" = 1'-0"

NOTE:

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REV.	DATE	REVISION DESCRIPTION	SHEET NO.
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CHECKED BY: **R. SALEH**

SCALE AS NOTED

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Filename: ..\SB_MSH_036_179_PE5.dgn

SIGNATURE/
BLOCK:

DESIGNED BY:
LUCHS CONSULTING ENGINEERS, LLC
89 COLONY STREET
MERIDEN, CT 06451

PROJECT TITLE:
ROUTE 8
INTERCHANGE 18
NEW NORTHBOUND ON-RAMP

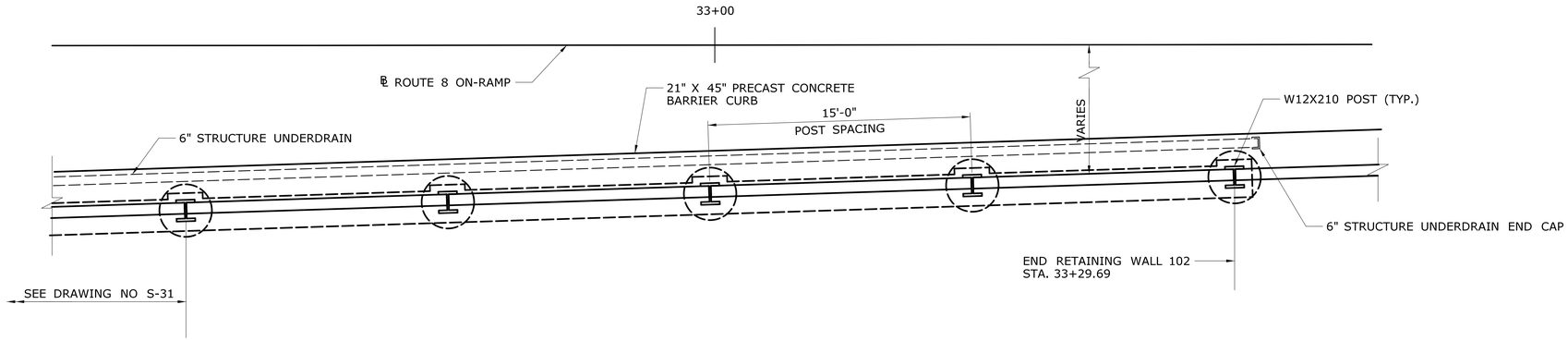
TOWN: **ANSONIA AND DERBY**

DRAWING TITLE: **NOISE BARRIER WALL AND WALL 102 PLAN & ELEVATION 5**

PROJECT NO. **36-179**

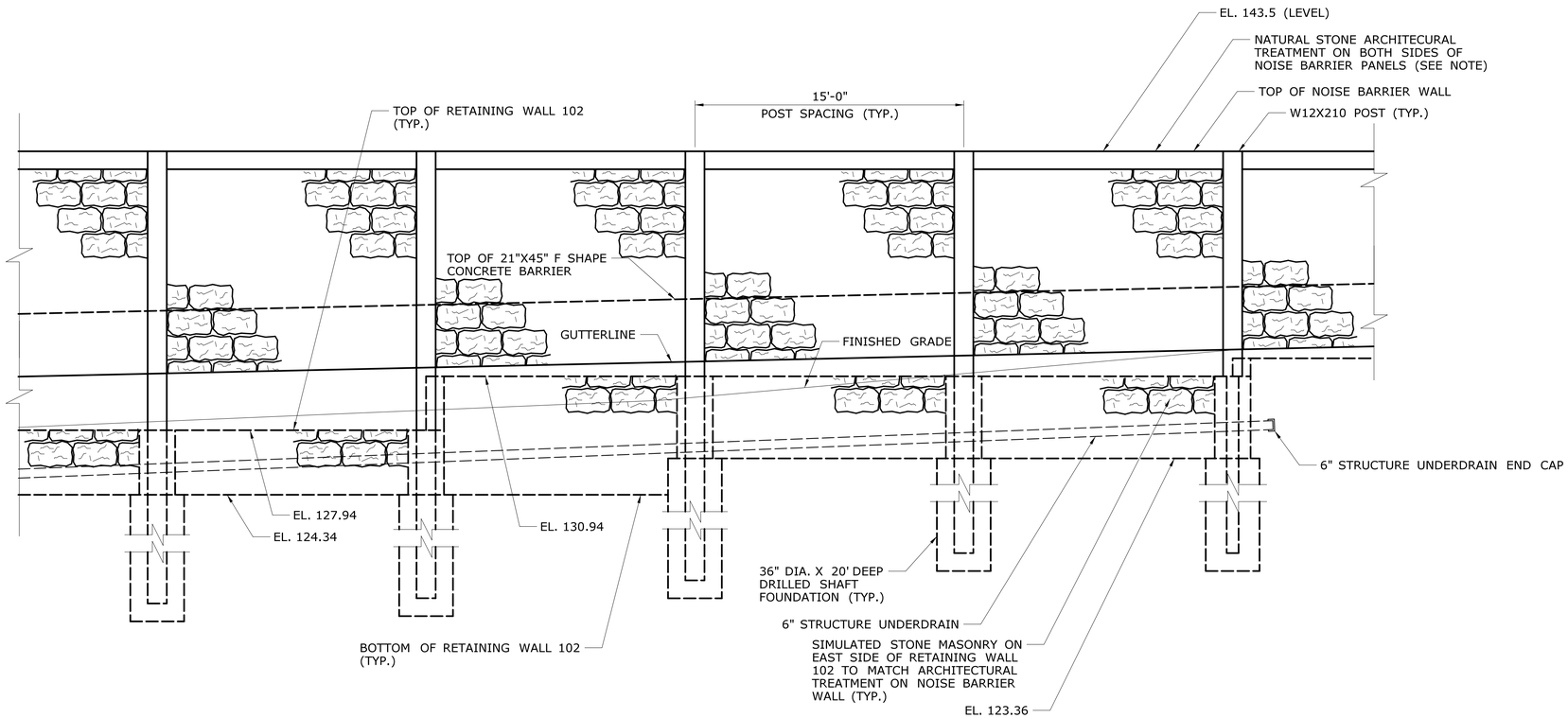
DRAWING NO. **S-31**

SHEET NO. **05.32**



PLAN

SCALE: 1/4" = 1'-0"



EAST ELEVATION

SCALE: 1/4" = 1'-0"

NOTE:

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Plotted Date: 5/5/2014

DESIGNER/DRAFTER: **D. SCHMALTZ**

CHECKED BY: **R. SALEH**

SCALE AS NOTED

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DEPARTMENT OF TRANSPORTATION

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DESIGNED BY:

LUCHS CONSULTING ENGINEERS, LLC
89 COLONY STREET
MERIDEN, CT 06451

PROJECT TITLE:

ROUTE 8
INTERCHANGE 18
NEW NORTHBOUND ON-RAMP

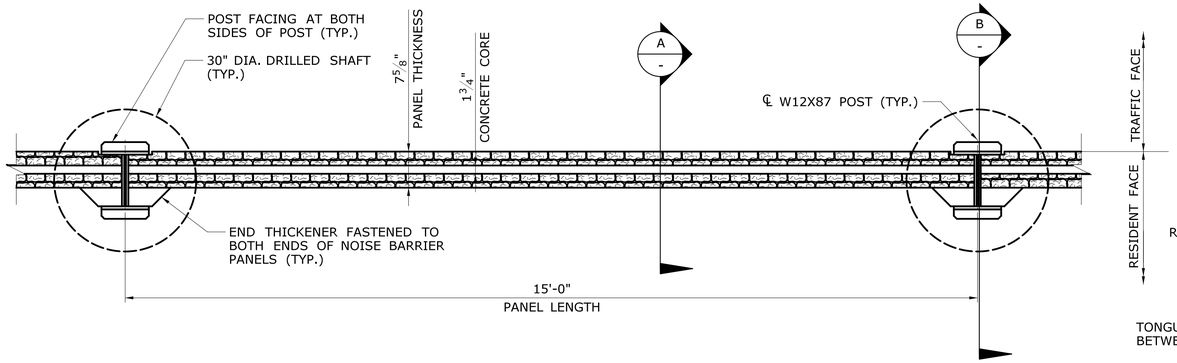
TOWN: **ANSONIA AND DERBY**

DRAWING TITLE: **NOISE BARRIER WALL AND WALL 102 PLAN & ELEVATION 6**

PROJECT NO. **36-179**

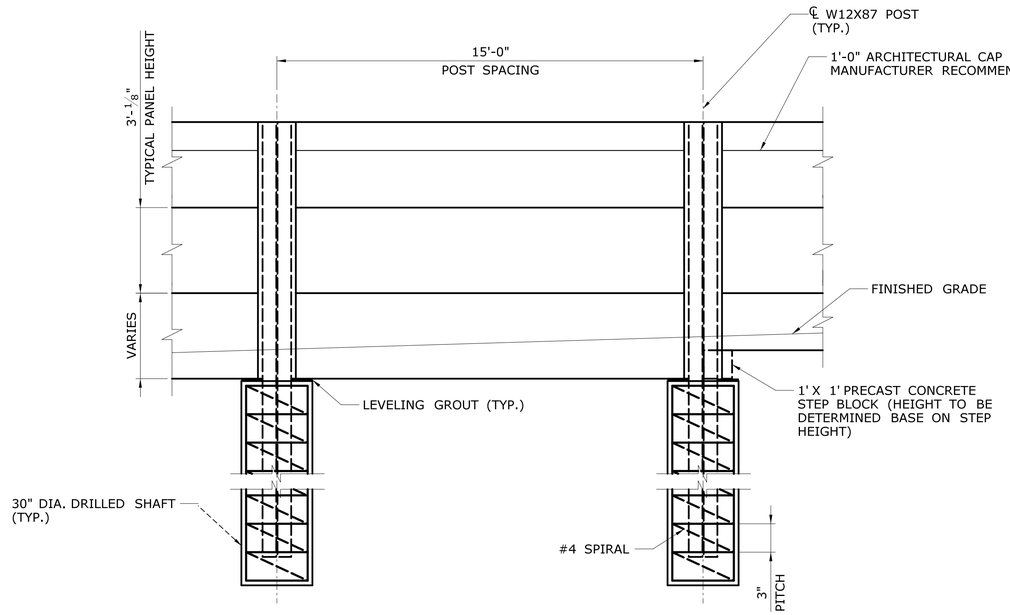
DRAWING NO. **S-32**

SHEET NO. **05.33**



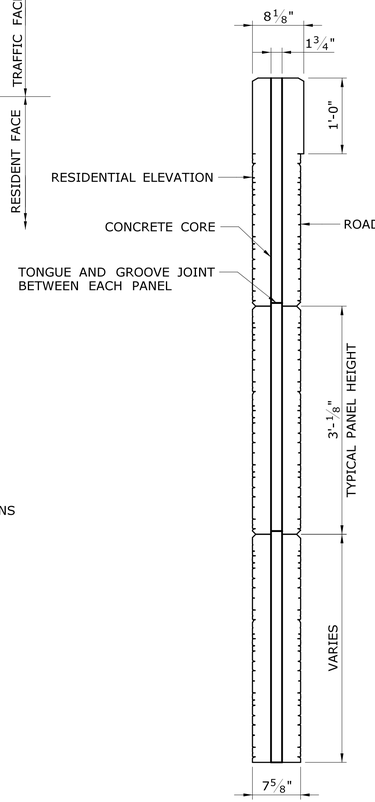
TYPICAL LONGITUDINAL SECTION OF NOISE BARRIER WALL

SCALE: 3/4" = 1'-0"



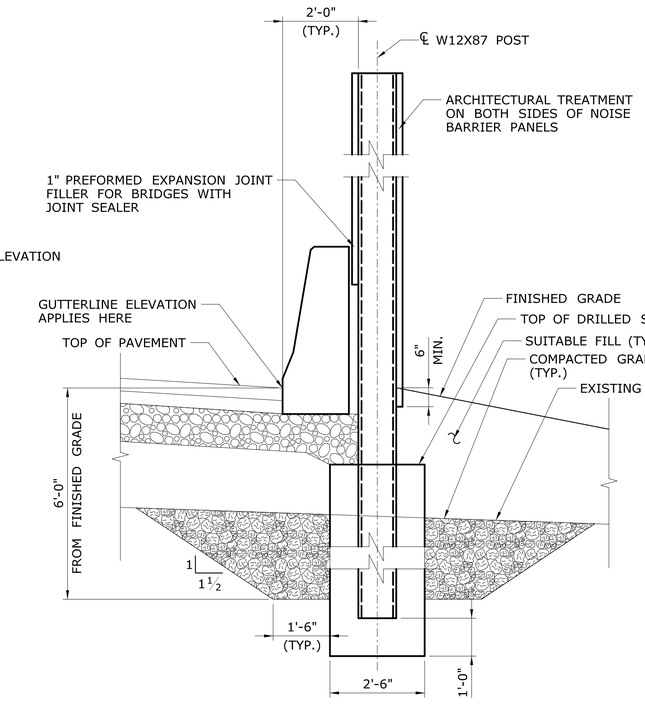
TYPICAL NOISE BARRIER WALL ELEVATION

SCALE: 3/8" = 1'-0"



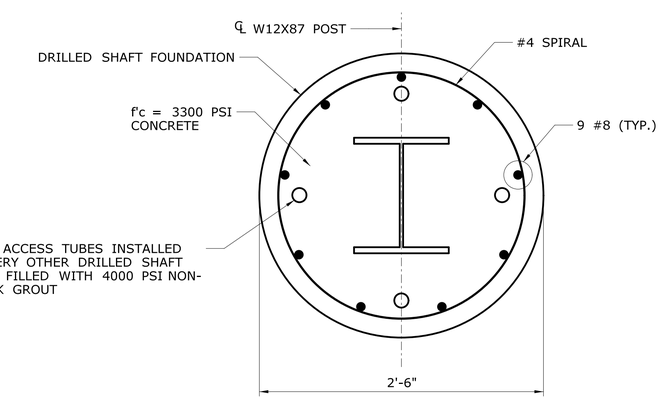
SECTION A

SCALE: 1" = 1'-0"



SECTION B

SCALE: 1/2" = 1'-0"



DRILLED SHAFT FOUNDATION AT NOISE BARRIER WALL

SCALE: 1 1/2" = 1'-0"

PAYMENT NOTES:

1. THE COST FOR FURNISHING AND INSTALLING NOISE BARRIER WALL PANELS AND POSTS INCLUDING THE ARCHITECTURAL FINISH, MISCELLANEOUS HARDWARE SHALL BE PAID FOR UNDER THE ITEM "NOISE BARRIER WALL" (SEE SPECIAL PROVISIONS).

2. THE COST FOR FURNISHING AND INSTALLING THE DRILLED SHAFT FOUNDATIONS, INCLUDING THE CONCRETE AND DEFORMED STEEL BARS SHALL BE INCLUDED UNDER THE ITEM "DRILLED SHAFT (2.5 FT). THE COST FOR THE EXCAVATION OF THE DRILLED SHAFT SHALL BE PAID FOR UNDER THE ITEM "DRILLED SHAFT EARTH EXCAVATION (2.5 FT)"

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Plotted Date: 6/11/2014

DESIGNER/DRAFTER: **D. SCHMALTZ**
CHECKED BY: **R. SALEH**
SCALE AS NOTED

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

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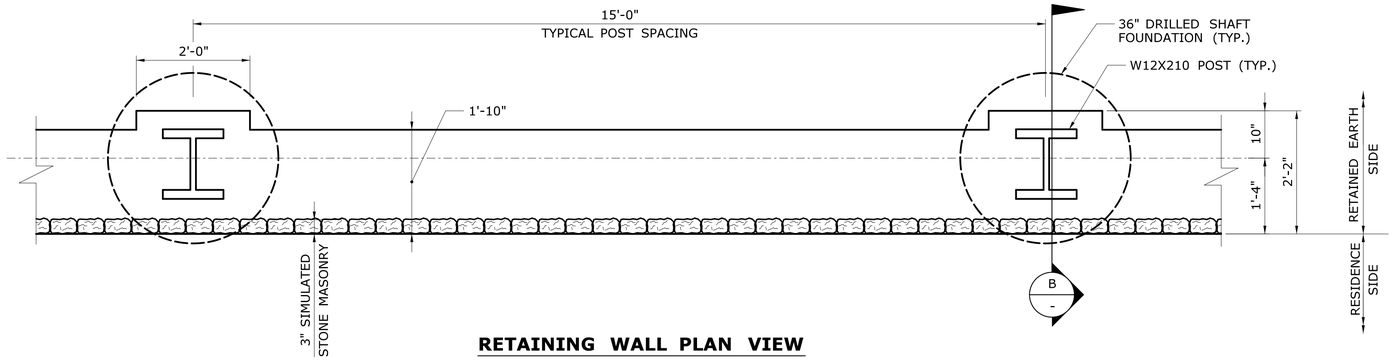
DESIGNED BY:
LUCHS CONSULTING ENGINEERS, LLC
89 COLONY STREET
MERIDEN, CT 06451

PROJECT TITLE:
ROUTE 8
INTERCHANGE 18
NEW NORTHBOUND ON-RAMP

TOWN: **ANSONIA AND DERBY**

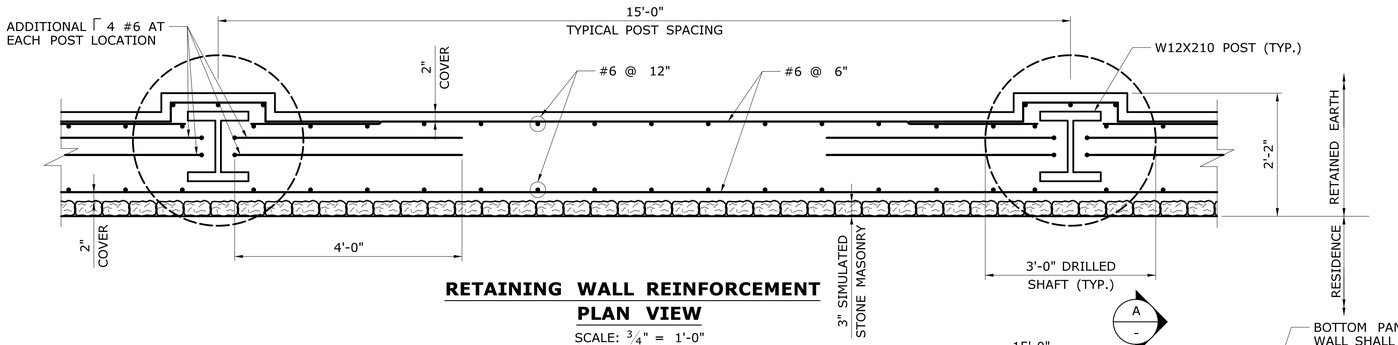
DRAWING TITLE: **NOISE BARRIER WALL & FOUNDATION DETAILS**

PROJECT NO. **36-179**
DRAWING NO. **S-33**
SHEET NO. **05.34**



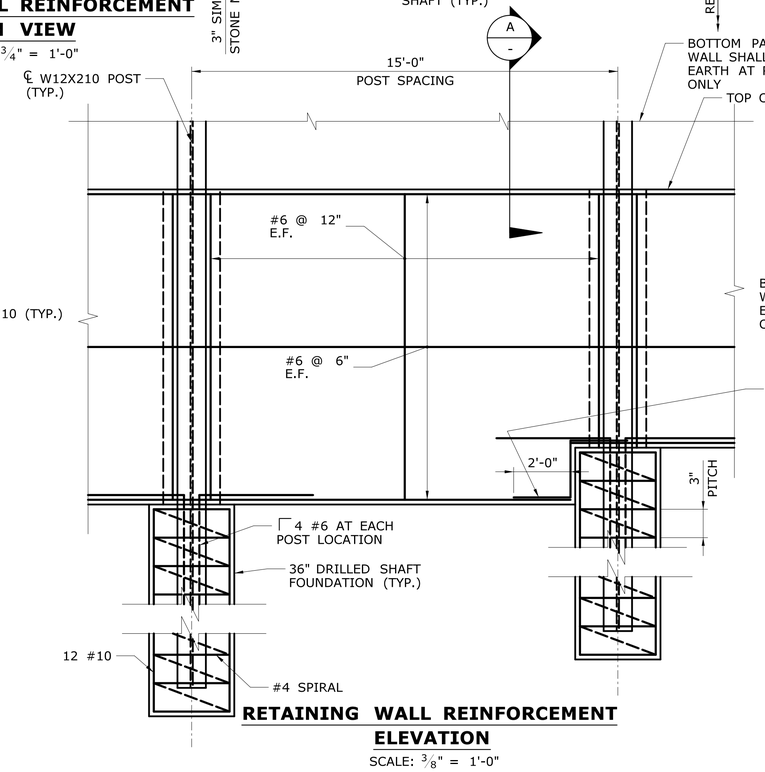
RETAINING WALL PLAN VIEW

SCALE: $\frac{3}{4}$" = 1'-0"



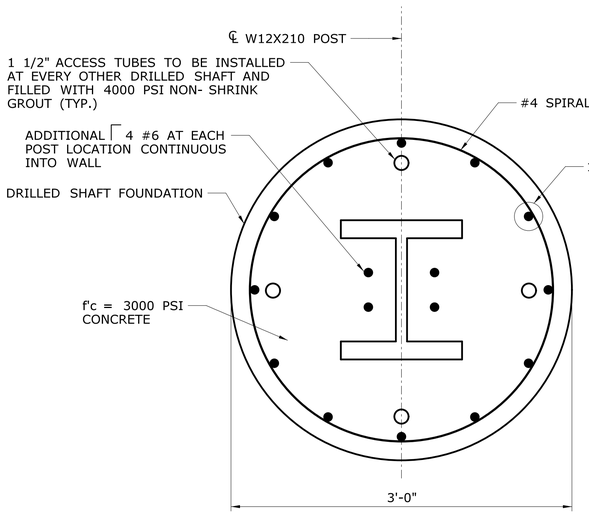
RETAINING WALL REINFORCEMENT PLAN VIEW

SCALE: $\frac{3}{4}$" = 1'-0"



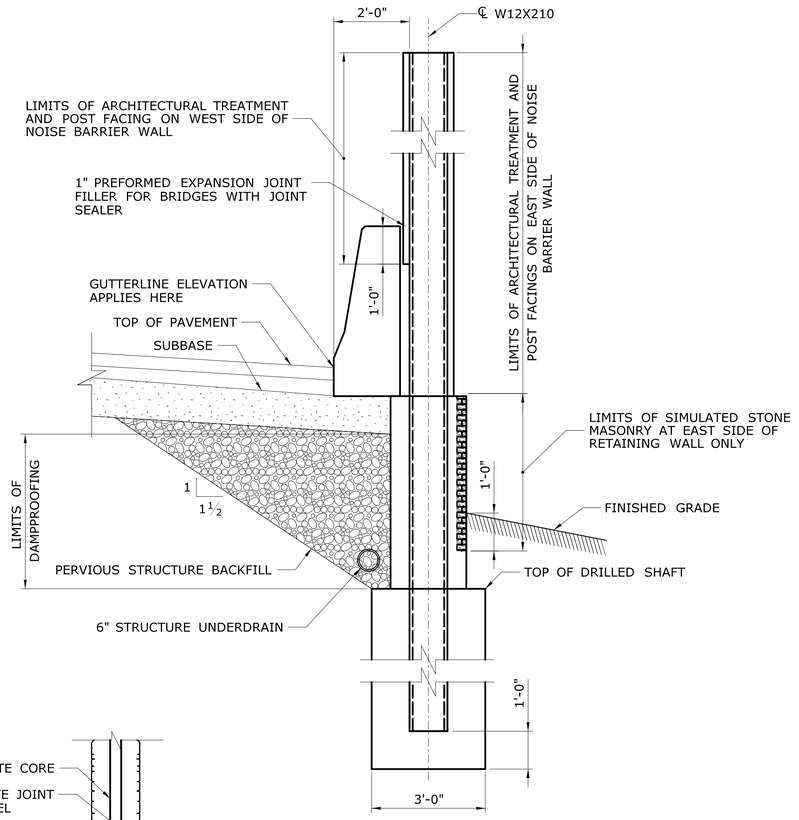
RETAINING WALL REINFORCEMENT ELEVATION

SCALE: $\frac{3}{8}$" = 1'-0"



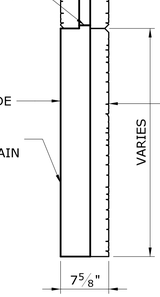
DRILLED SHAFT FOUNDATION AT RETAINING WALL

SCALE: $1\frac{1}{2}$" = 1'-0"



PROPOSED CROSS SECTION AT NOISE BARRIER WALL AND RETAINING WALL

SCALE: $\frac{1}{2}$" = 1'-0"



SECTION A

SCALE: 1" = 1'-0"

NOTE:

SEE DRAWING NUMBER S-33 FOR ADDITIONAL NOISE BARRIER WALL DETAILS

PAYMENT NOTES:

1. THE COST FOR FURNISHING AND INSTALLING CONCRETE FOR RETAINING WALL 102 SHALL BE PAID FOR UNDER THE ITEM "CLASS "A" CONCRETE".
2. THE COST FOR FURNISHING AND INSTALLING REINFORCING STEEL FOR RETAINING 102 SHALL BE PAID FOR UNDER THE ITEM "DEFORMED STEEL BARS".
3. THE COST FOR FURNISHING AND INSTALLING NOISE BARRIER WALL PANELS AND POSTS INCLUDING THE ARCHITECTURAL FINISH, MISCELLANEOUS HARDWARE SHALL BE PAID FOR UNDER THE ITEM "NOISE BARRIER WALL" (SEE SPECIAL PROVISIONS).
4. THE COST FOR FURNISHING AND INSTALLING THE DRILLED SHAFT FOUNDATIONS, INCLUDING THE CONCRETE AND DEFORMED STEEL BARS SHALL BE INCLUDED UNDER THE ITEM "DRILLED SHAFT (3.0' DIAMETER)". THE COST FOR THE EXCAVATION OF THE DRILLED SHAFT SHALL BE PAID FOR UNDER THE ITEM "DRILLED SHAFT EARTH EXCAVATION (3.0' DIAMETER)"
5. THE COST FOR FURNISHING AND INSTALLING 1 1/2" ACCESS TUBES AND THE NON-SHRINK GROUT FILLING MATERIAL SHALL BE PAID FOR UNDER THE ITEM "ACCESS TUBES".

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DEPARTMENT OF TRANSPORTATION

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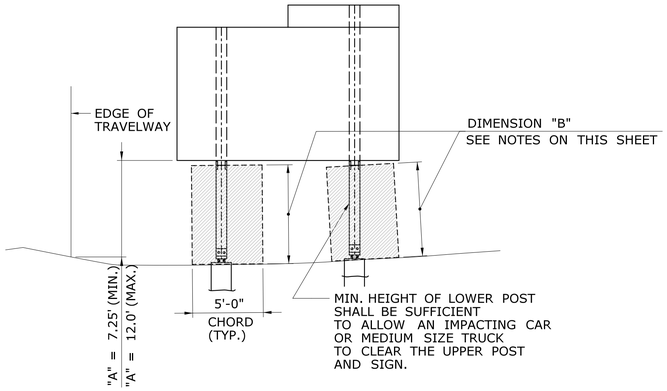
DESIGNED BY:
LUCHS CONSULTING ENGINEERS, LLC
89 COLONY STREET
MERIDEN, CT 06451

PROJECT TITLE:
ROUTE 8
INTERCHANGE 18
NEW NORTHBOUND ON-RAMP

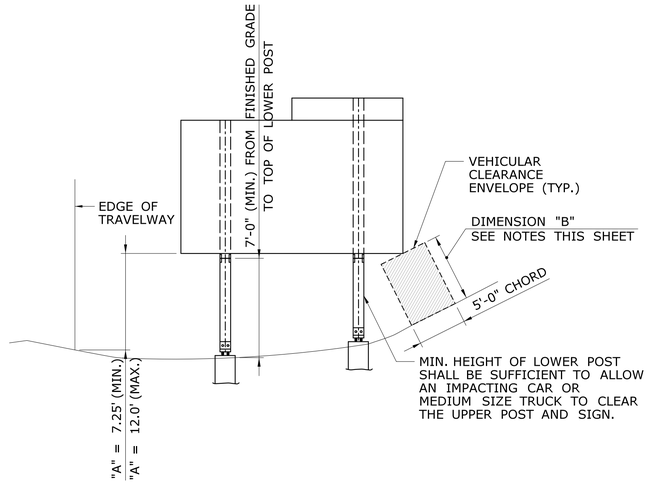
TOWN: ANSONIA AND DERBY

DRAWING TITLE: WALL 102 & FOUNDATION DETAILS

PROJECT NO. 36-179
DRAWING NO. S-34
SHEET NO. 05.35

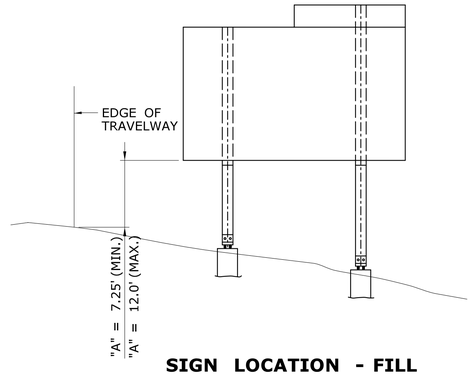


LEVEL TO SHALLOW SLOPES

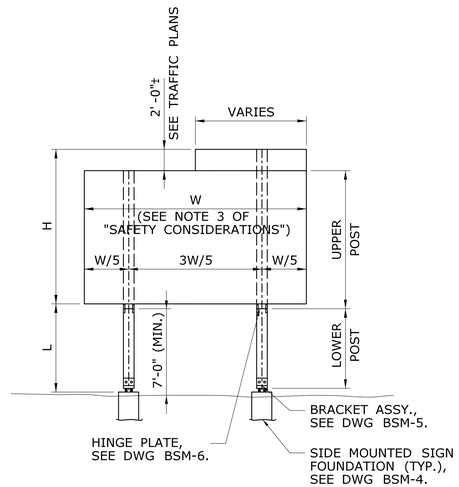


STEEPER SLOPES

SIGN LOCATION - CUT



SIGN LOCATION - FILL



TYPICAL POST MOUNTED SIGN

NOTES FOR DETERMINING DIMENSION "B"

1. DIMENSION "B" IS THE SMALLER OF:
   A. THE CLEAR DISTANCE BETWEEN THE BOTTOM OF SIGN AND THE FINISHED GRADE.
   B. THE CLEAR DISTANCE BETWEEN THE BOTTOM OF UPPER POST AND THE FINISHED GRADE.
2. DIMENSION "B" SHALL TYPICALLY BE A MINIMUM OF 7'-0" TO CLEAR AN IMPACTING CAR OR MEDIUM SIZE TRUCK.
3. WHEN DIMENSION "A" WOULD EXCEED 12'-0", CONSIDERATION MAY BE GIVEN TO REDUCING DIMENSION "B" IN ACCORDANCE WITH PROVISIONS OF NOTE 4.
4. DIMENSION "B" MAY BE LESS THAN 7'-0":
   A. IF THE POST IS OUT OF THE CLEAR ZONE.
   B. IF THE POST IS WITHIN THE CLEAR ZONE BUT SHIELDED BY AN APPROPRIATE BARRIER SYSTEM.
   C. IN NO CASE SHALL DIMENSION "B" BE LESS THAN 2'-6".
5. IF FIELD CONDITIONS EXCEED THESE REQUIREMENTS, CONTACT THE ENGINEER FOR DIRECTION.

NOTES ON TOTAL HEIGHT OF SIGN POSTS

1. UPPER SIGN POSTS SHALL EXTEND TO THE TOP OF FULL WIDTH SIGN PANEL OR THE TOP OF CROWN, WHICHEVER IS HIGHER.
2. FOR SIGN OR CROWN PANEL RETROFIT, THE EXISTING SIGN POSTS SHALL BE REPLACED WITH NEW POSTS OR EXTENDED WITH ADDITIONAL SECTIONS USING HINGE ASSEMBLIES. REFER TO TRAFFIC TYPICAL SHEETS "EXTRUDED SIGN PANEL - RETROFIT DETAIL".

SAFETY CONSIDERATIONS

1. THE HINGE BETWEEN THE UPPER AND LOWER POSTS SHALL BE AT LEAST 7 FT. ABOVE THE GROUND.
2. NO SUPPLEMENTARY SIGNS SHALL BE ATTACHED BELOW THE HINGES.
3. THE POST SPACING SHALL BE 3/5 W EXCEPT AS NOTED BELOW:

UNIT WEIGHT OF POST	POST SPACING REQUIREMENTS
LESS THAN 18 PLF	NO RESTRICTIONS ON POST SPACING **
FROM 18 PLF TO 45 PLF	PROVIDE AT LEAST 7 FT. CLEAR DISTANCE BETWEEN POSTS ***
EXCEEDS 45 PLF	RELOCATE SIGN OUTSIDE OF CLEAR ZONE OR SHIELD SIGN FROM VEHICULAR IMPACT AS DIRECTED BY THE ENGINEER

** IF THE TOTAL COMBINED WEIGHT OF ONE LOWER POST AND TWO BRACKETS EXCEEDS 600 LBS OR THE COMBINED WEIGHT OF TWO POSTS AND FOUR BRACKETS LOCATED WITHIN A CLEAR DISTANCE OF 7 FT OF EACH OTHER EXCEEDS 600 LBS, THE SIGN SHALL BE RELOCATED OUTSIDE OF THE CLEAR ZONE OR SHALL BE PROPERLY SHIELDED FROM VEHICULAR IMPACT AS DIRECTED BY THE ENGINEER. SEE "TABLE 1 - BRACKET DATA" ON BSM-5 FOR BRACKET WEIGHT.

*** IF THE REQUIRED CLEAR DISTANCE CANNOT BE ATTAINED, THE ENGINEER MAY DIRECT THAT THE SIGN BE RELOCATED OUTSIDE THE CLEAR ZONE OR THAT IT BE PROPERLY SHIELDED FROM VEHICULAR IMPACT.

SELECTING A POST SIZE, BRACKET NUMBER, AND HINGE TYPE

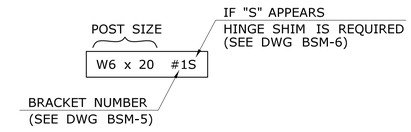
1. DETERMINE THE REQUIRED SIGN DIMENSIONS AND POST HEIGHTS (SEE "TYPICAL POST MOUNTED SIGN" DETAIL, THIS SHEET).

   W = SIGN WIDTH (HORIZONTAL DIMENSION)
   H = SIGN HEIGHT (VERTICAL DIMENSION) (ADD CROWN HEIGHT WHEN APPLICABLE)
   L = POST HEIGHT (THE DISTANCE BETWEEN THE TOP OF THE FOUNDATION AND THE BOTTOM OF THE SIGN MEASURED AT THE TALLER POST)

2. ENTER "POST SELECTION TABLE 1 AND 2" ON DWG BSM-2 AND BSM-3 WITH THE DESIRED VALUES OF W, H, AND L. ROUND UP TO THE NEAREST VALUES IN THE TABLE. READ THE CORRESPONDING POST SIZE AND BRACKET NUMBER. REFER TO DWG BSM-5 FOR BRACKET TYPE AND BSM-6 FOR TYPICAL HINGE REQUIREMENTS.

   EXAMPLE: W = 8', L = 10', H = 14'

   ENTER "POST SELECTION TABLE 1" ON DWG BSM-2 SINCE TABLE 1 IS APPLICABLE FOR SIGN WIDTH ≤ 15'. LOCATE THE FOLLOWING CELL:



3. IF NO POST SIZE IS SHOWN FOR THE COMBINATION OF DIMENSIONS W, L, AND H, THE ENGINEER WILL EITHER PROVIDE A DESIGN FOR THE POST AND FOUNDATION OR RELOCATE THE SIGN.

BREAKAWAY SIGN SUPPORT TYPICAL SHEETS ARE IN US CUSTOMARY UNITS

FOR METRIC PROJECTS:
1. DETERMINE US CUSTOMARY POST SIZE FROM THE POST SELECTION TABLE.
2. CALCULATE THE WEIGHT OF POSTS IN US CUSTOMARY UNITS (CWT) THEN USE THE FOLLOWING CONVERSION FACTOR TO CONVERT CWT TO KILOGRAMS.

1 CWT = 45.36 KG

EXAMPLE: 120 CWT x 45.36 KG/CWT = 5443 KG

TABLE OF CONTENT

REV.	DATE	REVISION DESCRIPTION	SHEET NO.
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.

Plotted Date: 4/28/2014

DESIGNER/DRAFTER: **BKC**
CHECKED BY: **JRH**
SCALE AS NOTED

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: ...\SB_Breakaway_Signpost_BSM1_General Note.dgn

SIGNATURE/ BLOCK:

DESIGNED BY:
LUCHS CONSULTING ENGINEERS, LLC
89 COLONY STREET
MERIDEN, CT 06451

PROJECT TITLE:
ROUTE 8
INTERCHANGE 18
NEW NORTHBOUND ON-RAMP

TOWN: **ANSONIA AND DERBY**

DRAWING TITLE: **BREAKAWAY SIGN SUPPORTS GENERAL NOTES**

PROJECT NO. **36-179**
DRAWING NO. **BSM-1**
SHEET NO. **05.36**

POST SELECTION TABLE 1

W	L	H (Sign Height + Crown Height)																		
		4 ft	5 ft	6 ft	7 ft	8 ft	9 ft	10 ft	11 ft	12 ft	13 ft	14 ft	15 ft	16 ft	17 ft	18 ft	19 ft	20 ft	21 ft	22 ft
8 ft	7 ft	W6 x 9 #3	W6 x 9 #3	W6 x 9 #2	W6 x 9 #2	W6 x 9 #2	W6 x 12 #2	W6 x 12 #2	W6 x 12 #2	W6 x 15 #2	W6 x 15 #1	W6 x 15 #1S	W6 x 16 #1S	W8 x 18 #2S	W8 x 21 #1S	W10 x 22 #2	W10 x 22 #2	W10 x 26 #2	W10 x 26 #1S	W10 x 26 #1S
	8 ft	W6 x 9 #2	W6 x 9 #2	W6 x 9 #2	W6 x 9 #2	W6 x 12 #2	W6 x 12 #2	W6 x 12 #2	W6 x 15 #2	W6 x 15 #1	W6 x 15 #1	W6 x 16 #1S	W8 x 18 #1	W8 x 21 #1S	W8 x 21 #1S	W10 x 22 #2	W10 x 26 #1	W10 x 26 #1	W10 x 26 #1S	W10 x 30 #1S
	9 ft	W6 x 9 #2	W6 x 9 #2	W6 x 9 #2	W6 x 12 #2	W6 x 12 #2	W6 x 12 #2	W6 x 15 #1	W6 x 15 #1	W6 x 15 #1	W6 x 16 #1	W8 x 18 #1	W6 x 20 #1S	W8 x 21 #1S	W8 x 21 #1S	W10 x 26 #1	W10 x 26 #1	W10 x 26 #1	W10 x 30 #1S	W12 x 30 #1
	10 ft	W6 x 9 #2	W6 x 9 #2	W6 x 12 #2	W6 x 12 #2	W6 x 12 #1	W6 x 15 #1	W6 x 15 #1	W6 x 15 #1	W6 x 15 #1	W8 x 18 #1	W6 x 20 #1S	W6 x 20 #1S	W8 x 21 #1S	W10 x 26 #1	W10 x 26 #1	W10 x 26 #1	-	-	-
	11 ft	W6 x 9 #2	W6 x 9 #2	W6 x 12 #1	W6 x 12 #1	W6 x 15 #1	W6 x 15 #1	W6 x 15 #1	W6 x 15 #1	W8 x 18 #1	W6 x 20 #1	W6 x 20 #1S	W8 x 21 #1	-	-	-	-	-	-	-
	12 ft	W6 x 9 #2	W6 x 12 #1	W6 x 12 #1	W6 x 15 #1	W6 x 15 #1	W6 x 15 #1	W6 x 15 #1	W8 x 18 #1	W6 x 20 #1	W6 x 20 #1	W6 x 20 #1S	-	-	-	-	-	-	-	-
	13 ft	W6 x 12 #1	W6 x 12 #1	W6 x 12 #1	W6 x 15 #1	W6 x 15 #1	W6 x 15 #1	W8 x 18 #1	W8 x 18 #1	W6 x 20 #1	W6 x 20 #1	-	-	-	-	-	-	-	-	-
	14 ft	W6 x 12 #1	W6 x 12 #1	W6 x 15 #1	W6 x 15 #1	W6 x 15 #1	W6 x 16 #1	W8 x 18 #1	W6 x 20 #1	W6 x 20 #1	-	-	-	-	-	-	-	-	-	-
	15 ft	W6 x 12 #1	W6 x 15 #1	W6 x 15 #1	W6 x 15 #1	W6 x 15 #1	W8 x 18 #1	-	-	-	-	-	-	-	-	-	-	-	-	-
	16 ft	W6 x 12 #1	W6 x 15 #1	W6 x 15 #1	W6 x 15 #1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9 ft	7 ft	W6 x 9 #3	W6 x 9 #3	W6 x 9 #2	W6 x 9 #2	W8 x 10 #2	W6 x 12 #2	W6 x 12 #2	W6 x 15 #2	W6 x 15 #2	W6 x 15 #1S	W6 x 15 #1S	W8 x 18 #2S	W8 x 21 #2S	W10 x 22 #2	W10 x 22 #2	W10 x 26 #2	W10 x 26 #2S	W10 x 26 #1S	W12 x 30 #2S
	8 ft	W6 x 9 #2	W6 x 9 #2	W6 x 9 #2	W8 x 10 #2	W6 x 12 #2	W6 x 12 #2	W6 x 15 #2	W6 x 15 #2	W6 x 15 #1	W6 x 15 #1S	W8 x 18 #2	W8 x 21 #2S	W8 x 21 #1S	W10 x 22 #2	W10 x 26 #2	W10 x 26 #1	W10 x 26 #1S	W12 x 30 #2	W12 x 30 #2S
	9 ft	W6 x 9 #2	W6 x 9 #2	W6 x 9 #2	W6 x 12 #2	W6 x 12 #2	W6 x 15 #2	W6 x 15 #1	W6 x 15 #1	W6 x 15 #1	W8 x 18 #2	W6 x 20 #1S	W8 x 21 #1S	W8 x 21 #1S	W10 x 26 #2	W10 x 26 #2	W10 x 26 #1	W10 x 30 #1S	W12 x 30 #1	-
	10 ft	W6 x 9 #2	W6 x 9 #2	W6 x 12 #2	W6 x 12 #2	W6 x 15 #1	W6 x 15 #1	W6 x 15 #1	W6 x 15 #1	W8 x 18 #1	W6 x 20 #1S	W6 x 20 #1S	W8 x 21 #1S	W10 x 26 #1	W10 x 26 #1	W10 x 26 #1	-	-	-	-
	11 ft	W6 x 9 #2	W6 x 12 #2	W6 x 12 #1	W6 x 15 #1	W6 x 15 #1	W6 x 15 #1	W8 x 18 #1	W8 x 18 #1	W8 x 18 #1	W6 x 20 #1S	W8 x 21 #1	-	-	-	-	-	-	-	-
	12 ft	W6 x 9 #2	W6 x 12 #1	W6 x 12 #1	W6 x 15 #1	W6 x 15 #1	W6 x 15 #1	W8 x 18 #1	W8 x 18 #1	W6 x 20 #1	W6 x 20 #1S	-	-	-	-	-	-	-	-	-
	13 ft	W6 x 12 #1	W6 x 12 #1	W6 x 15 #1	W6 x 15 #1	W6 x 16 #1	W8 x 18 #1	W6 x 20 #1	W6 x 20 #1	W6 x 20 #1	-	-	-	-	-	-	-	-	-	-
	14 ft	W6 x 12 #1	W6 x 12 #1	W6 x 15 #1	W6 x 15 #1	W6 x 15 #1	W8 x 18 #1	W6 x 20 #1	W6 x 20 #1	W6 x 20 #1	-	-	-	-	-	-	-	-	-	-
	15 ft	W6 x 12 #1	W6 x 15 #1	W6 x 15 #1	W6 x 15 #1	W8 x 18 #1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	16 ft	W6 x 15 #1	W6 x 15 #1	W6 x 15 #1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10 ft	7 ft	W6 x 9 #3	W6 x 9 #3	W6 x 9 #2	W6 x 9 #2	W6 x 12 #2	W6 x 12 #2	W6 x 12 #2	W6 x 15 #2	W6 x 15 #2	W6 x 15 #1S	W8 x 18 #2	W8 x 18 #2S	W10 x 22 #2	W10 x 22 #2	W10 x 26 #2	W10 x 26 #2S	W10 x 26 #2S	W12 x 30 #2S	W14 x 30 #2S
	8 ft	W6 x 9 #2	W6 x 9 #2	W6 x 9 #2	W6 x 12 #2	W6 x 12 #2	W6 x 12 #2	W6 x 15 #2	W6 x 15 #1	W6 x 15 #1	W8 x 18 #2	W8 x 18 #2S	W8 x 21 #1S	W10 x 22 #2	W10 x 26 #2	W10 x 26 #2	W10 x 26 #1S	W12 x 30 #2	W14 x 30 #2	-
	9 ft	W6 x 9 #2	W6 x 9 #2	W6 x 12 #2	W6 x 12 #2	W6 x 12 #2	W6 x 15 #2	W6 x 15 #1	W6 x 15 #1	W8 x 18 #1	W8 x 18 #2	W6 x 20 #1S	W8 x 21 #1S	W10 x 26 #2	W10 x 26 #1	W10 x 26 #1	W12 x 30 #2	W12 x 30 #2	-	-
	10 ft	W6 x 9 #2	W6 x 9 #2	W6 x 12 #2	W6 x 12 #2	W6 x 15 #1	W6 x 15 #1	W6 x 15 #1	W6 x 15 #1	W8 x 18 #1	W6 x 20 #1S	W6 x 20 #1S	W8 x 21 #1S	W10 x 26 #2	W10 x 26 #1	W10 x 26 #1	-	-	-	-
	11 ft	W6 x 9 #2	W6 x 12 #2	W6 x 12 #1	W6 x 15 #1	W6 x 15 #1	W6 x 15 #1	W8 x 18 #1	W6 x 20 #1	W6 x 20 #1S	W8 x 21 #1	-	-	-	-	-	-	-	-	-
	12 ft	W6 x 12 #2	W6 x 12 #1	W6 x 15 #1	W6 x 15 #1	W6 x 15 #1	W8 x 18 #1	W6 x 20 #1	W6 x 20 #1	W8 x 21 #1	-	-	-	-	-	-	-	-	-	-
	13 ft	W6 x 12 #1	W6 x 15 #1	W6 x 15 #1	W6 x 15 #1	W8 x 18 #1	W8 x 18 #1	W6 x 20 #1	W6 x 20 #1	-	-	-	-	-	-	-	-	-	-	-
	14 ft	W6 x 12 #1	W6 x 15 #1	W6 x 15 #1	W6 x 15 #1	W8 x 18 #1	W6 x 20 #1	W6 x 20 #1	-	-	-	-	-	-	-	-	-	-	-	-
	15 ft	W6 x 15 #1	W6 x 15 #1	W6 x 15 #1	W8 x 18 #1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	16 ft	W6 x 15 #1	W6 x 15 #1	W6 x 15 #1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11 ft	7 ft	W6 x 9 #3	W6 x 9 #3	W6 x 9 #2	W8 x 10 #3	W6 x 12 #2	W6 x 12 #2	W6 x 15 #2	W6 x 15 #2	W6 x 15 #2S	W6 x 15 #1S	W8 x 18 #2S	W8 x 21 #2S	W10 x 22 #2	W10 x 22 #2	W10 x 26 #2	W10 x 26 #2S	W12 x 26 #2S	W14 x 30 #2S	W16 x 36 #2S
	8 ft	W6 x 9 #2	W6 x 9 #2	W6 x 9 #2	W6 x 12 #2	W6 x 12 #2	W6 x 15 #2	W6 x 15 #2	W6 x 15 #1	W6 x 15 #1S	W8 x 18 #2	W8 x 21 #2S	W8 x 21 #1S	W10 x 22 #2	W10 x 26 #2	W10 x 26 #2S	W12 x 30 #2	W14 x 30 #2	-	-
	9 ft	W6 x 9 #2	W6 x 12 #2	W6 x 12 #2	W6 x 12 #2	W6 x 15 #2	W6 x 15 #2	W6 x 15 #1	W6 x 15 #1	W8 x 18 #2	W6 x 20 #1S	W8 x 21 #1S	W10 x 22 #2	W10 x 26 #2	W10 x 26 #2	W10 x 26 #1S	W12 x 30 #2	-	-	-
	10 ft	W6 x 9 #2	W6 x 12 #2	W6 x 12 #2	W6 x 15 #2	W6 x 15 #1	W6 x 15 #1	W8 x 18 #2	W8 x 18 #1	W6 x 20 #1S	W8 x 21 #1S	W10 x 26 #2	W10 x 26 #1	W10 x 26 #1	W10 x 26 #1	-	-	-	-	-
	11 ft	W6 x 9 #2	W6 x 12 #2	W6 x 12 #1	W6 x 15 #1	W6 x 15 #1	W6 x 15 #1	W8 x 18 #1	W6 x 20 #1	W6 x 20 #1S	W8 x 21 #1	-	-	-	-	-	-	-	-	-
	12 ft	W6 x 12 #2	W6 x 12 #1	W6 x 15 #1	W6 x 15 #1	W6 x 15 #1	W8 x 18 #1	W6 x 20 #1	W6 x 20 #1	W8 x 21 #1	-	-	-	-	-	-	-	-	-	-
	13 ft	W6 x 12 #1	W6 x 15 #1	W6 x 15 #1	W6 x 15 #1	W8 x 18 #1	W8 x 18 #1	W6 x 20 #1	W6 x 20 #1	-	-	-	-	-	-	-	-	-	-	-
	14 ft	W6 x 12 #1	W6 x 15 #1	W6 x 15 #1	W6 x 15 #1	W8 x 18 #1	W6 x 20 #1	W6 x 20 #1	W6 x 20 #1	-	-	-	-	-	-	-	-	-	-	-
	15 ft	W6 x 15 #1	W6 x 15 #1	W6 x 15 #1	W8 x 18 #1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	16 ft	W6 x 15 #1	W6 x 15 #1	W6 x 15 #1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12 ft	7 ft	W6 x 9 #3	W6 x 9 #3	W6 x 9 #2	W6 x 12 #2	W6 x 12 #2	W6 x 12 #2	W6 x 15 #2	W6 x 15 #2	W6 x 15 #2S	W6 x 15 #2S	W8 x 18 #2S	W8 x 18 #2S	W10 x 22 #2	W10 x 22 #2	W10 x 26 #2	W10 x 26 #2S	W12 x 26 #2S	W14 x 30 #2S	W18 x 35 #2	W18 x 40 #2
	8 ft	W6 x 9 #2	W6 x 9 #2	W6 x 12 #2	W6 x 12 #2	W6 x 12 #2	W6 x 15 #2	W6 x 15 #2	W6 x 15 #1	W8 x 18 #2	W8 x 18 #2S	W8 x 21 #2S	W10 x 22 #2	W10 x 26 #2	W10 x 26 #2	W10 x 26 #2	W12 x 26 #2	W14 x 30 #2	W18 x 35 #2	-	-
	9 ft	W6 x 9 #2	W8 x 10 #2	W6 x 12 #2	W6 x 12 #2	W6 x 15 #2	W6 x 15 #2	W6 x 15 #1	W8 x 18 #2	W8 x 18 #2	W8 x 21 #1S	W8 x 21 #1S	W10 x 26 #2	W10 x 26 #2	W10 x 26 #1	W12 x 30 #2	-	-	-	-
	10 ft	W6 x 9 #2	W6 x 12 #2	W6 x 12 #2	W6 x 15 #2	W6 x 15 #1	W6 x 15 #1	W8 x 18 #2	W8 x 18 #1	W6 x 20 #1S	W8 x 21 #1S	W10 x 26 #2	W10 x 26 #1	W10 x 26 #1	-	-	-	-	-	-
	11 ft	W6 x 12 #2	W6 x 12 #2	W6 x 15 #1	W6 x 15 #1	W6 x 15 #1	W6 x 16 #1	W8 x 18 #1	W6 x 20 #1	W8 x 21 #1	-	-	-	-	-	-	-	-	-	-
	12 ft	W6 x 12 #2	W6 x 12 #1	W6 x 15 #1	W6 x 15 #1	W6 x 15 #1	W8 x 18 #1	W6 x 20 #1	W6 x 20 #1	-	-	-	-	-	-	-	-	-	-	-
	13 ft	W6 x 12 #1	W6 x 15 #1	W6 x 15 #1	W8 x 18 #1	W6 x 20 #1	W6 x 20 #1	W6 x 20 #1	-	-	-	-	-	-	-	-	-	-	-	-
	14 ft	W6 x 12 #1	W6 x 15 #1	W6 x 15 #1	W8 x 18 #1	W6 x 20 #1	W6 x 20 #1	W6 x 20 #1	-	-	-	-	-	-	-	-	-	-	-	-
	15 ft	W6 x 15 #1	W6 x 15 #1	W6 x 15 #1	W8 x 18 #1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	16 ft	W6 x 15 #1	W6 x 15 #1	W6 x 15 #1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13 ft	7 ft	W6 x 9 #3	W6 x 9 #2	W6 x 9 #2	W6 x 12 #2	W6 x 12 #2	W6 x 15 #2	W6 x 15 #2	W6 x 15 #2S	W6 x 15 #2S	W8 x 18 #2S	W8 x 21 #2S	W10 x 22 #2	W10 x 22 #2	W10 x 26 #2S	W12 x 26 #2	W14 x 30 #2	W18 x 35 #2	W18 x 40 #2	W21 x 44 #3
	8 ft	W6 x 9 #2	W6 x 9 #2	W6 x 12 #2	W6 x 12 #2	W6 x 15 #2	W6 x 15 #2	W6 x 15 #1	W6 x 15 #1	W8 x 18 #2	W8 x 21 #2S	W8 x 21 #1S	W10 x 22 #2	W10 x 26 #2	W10 x 26 #2S	W12 x 30 #2	W14 x 34 #2	W18 x 40 #2	W21 x 44 #3	W21 x 44 #3
	9 ft	W6 x 9 #2	W6 x 12 #2	W6 x 12 #2	W6 x 15 #2	W6 x 15 #1	W6 x 15 #1	W8 x 18 #2	W8 x 18 #2	W8 x 21 #1S	W8 x 21 #1S	W10 x 26 #2	W10 x 26 #2	W10 x 26 #1	W12 x 30 #2	W14 x 30 #2	W16 x 36 #2	W18 x 40 #2	W21 x 44 #2	-
	10 ft	W6 x 9 #2	W6 x 12 #2	W6 x 12 #2	W6 x 15 #2	W6 x 15 #1	W6 x 15 #1	W8 x 18 #2	W8 x 18 #1	W6 x 20 #1S	W8 x 21 #1	W10 x 22 #2	W10 x 26 #2	W10 x 26 #1	W12 x 30 #2	W14 x 30 #2	W16 x 36 #2	W18 x 40 #2	W21 x 44 #2	-
	11 ft	W6 x 12 #2	W6 x 12 #2	W6 x 15 #1	W6 x 15 #1	W6 x 15 #1	W6 x 16 #1	W8 x 18 #1	W6 x 20 #1	W8 x 21 #1	-	-	-	-	-	-	-	-	-	-
	12 ft	W6 x 12 #2	W6 x 12 #1	W6 x 15 #1	W6 x 15 #1	W6 x 15 #1	W8 x 18 #1	W6 x 20 #1	W6 x 20 #1	-	-	-	-	-	-	-	-	-	-	-
	13 ft	W6 x 12 #1	W6 x 15 #1	W6 x 15 #1	W8 x 18 #1	W6 x 20 #1	W6 x 20 #1	W6 x 20 #1	-	-	-	-	-	-	-	-	-	-	-	-
	14 ft	W6 x 12 #1	W6 x 15 #1	W6 x 15 #1	W8 x 18 #1	W6 x 20 #1	W6 x 20 #1	W6 x 20 #1	-	-	-	-	-	-	-	-	-	-	-	-
	15 ft	W6 x 15 #1	W6 x 15 #1	W6 x 15 #1	W8 x 18 #1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	16 ft	W6 x 15 #1	W6 x 15 #1	W6 x 15 #1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14 ft	7 ft	W6 x 9 #3	W6 x 9 #2	W8 x 10 #3	W6 x 12 #2	W6 x 12 #2	W6 x 15 #2	W6 x 15 #2	W6 x 15 #2S	W8 x 18 #2	W8 x 18 #2S	W8 x 21 #2S	W10 x 22 #2	W10 x 26 #2	W10 x 26 #2S	W12 x 26 #2S	W14 x 30 #2S	W18 x 35 #3	W21 x 44 #3	-
	8 ft	W6 x 9 #2	W6 x 9 #2	W6 x 12 #2	W6 x 12 #2	W6 x 15 #2	W6 x 15 #2	W6 x 15 #2	W6 x 15 #2	W8 x 18 #2	W8 x 18 #2S	W8 x 21 #2S	W10 x 22 #2	W10 x 26 #2	W10 x 26 #2	W12 x 26 #2	W14 x 30 #2	W18 x 35 #2	W18 x 40 #2	W21 x 44 #3
	9 ft	W6 x 9 #2	W6 x 12 #2	W6 x 12 #2	W6 x 15 #2	W6 x 15 #1	W6 x 15 #1	W8 x 18 #2	W8 x 18 #2	W8 x 18 #2S	W8 x 21 #2S	W10 x 22 #2	W10 x 26 #2	W10 x 26 #2	W12 x 26 #2	W14 x 30 #2	W16 x 36 #2	W18 x 40 #2	W21 x 44 #3	-
	10 ft	W6 x 12 #2	W6 x 12 #2	W6 x 15 #2	W6 x 15 #2	W6 x 15 #1	W8 x 18 #2	W8 x 18 #2	W6 x 20 #1S	W8 x 21 #1S	W10 x 26 #2	W10 x 26 #2	W10 x 26 #1	W12 x 30 #2	W16 x 36 #2	W18 x 40 #2	W21 x 44 #3	-	-	-
	11 ft	W6 x 12 #2	W6 x 12 #2	W6 x 15 #1	W6 x 15 #1	W6 x 16 #1	W8 x 18 #2	W6 x 20 #1	W8 x 21 #1	W10 x 26 #2	W10 x 26 #2	W10 x 26 #1	W12 x 30 #2	W16 x 36 #2	W18 x 40 #2	-	-	-	-	-
	12 ft	W6 x 12 #2	W6 x 12 #1	W6 x 15 #1	W6 x 15 #1	W6 x 15 #1	W8 x 18 #1	W6 x 20 #1	W6 x 20 #1	W10 x 26 #1	W10 x 26 #1	W10 x 26 #1	W10 x 30 #1	W12 x 30 #2	W14 x 34 #2	W18 x 40 #2	W21 x 44 #2	-	-	-
	13 ft	W6 x 12 #1	W6 x 15 #1	W6 x 15 #1	W8 x 18 #1	W6 x 20 #1	W6 x 20 #1	W6 x 20 #1	W8 x 24 #1	W10 x 26 #1	W10 x 26 #1	W10 x 30 #1	W12 x 30 #1	W14 x 34 #1	W16 x 40 #2	-	-	-	-	-
	14 ft	W6 x 15 #1	W6 x 15 #1	W6 x 15 #1	W8 x 18 #1	W6 x 20 #1	W6 x 20 #1	W8 x 24 #1	W10 x 26 #1	W10 x 26 #1	W10 x 30 #1	W10 x 30 #1	W14 x 34 #1	-	-	-	-	-	-	-
	15 ft	W6 x 15 #1	W6 x 15 #1	W6 x 15 #1	W8 x 18 #1	W6 x 20 #1	W6 x 20 #1	W8 x 24 #1	W10 x 26 #1	W10 x 30 #1	W10 x 30 #1	W10 x 30 #1	W14 x 34 #1	-	-	-	-	-	-	-
	16 ft	W6 x 15 #1	W6 x 16 #1	W8 x 18 #1	W6 x 20 #1	W6 x 20 #1	W6 x 20 #1	W8 x 24 #1	W10 x 26 #1	W10 x 30 #1	W10 x 30 #1	W14 x 34 #1	-	-	-	-	-	-	-	-
15 ft	7 ft	-	W6 x 9 #2	W8 x 10 #3	W6 x 12 #2	W12 x 14 #3	W6 x 15 #2	W6 x 15 #2	W6 x 15 #2S	W6 x 15 #2S	W8 x 18 #2S	W8 x 21 #2S	W10 x 22 #2	W10 x 22 #2	W10 x 26 #2S	W12 x 26 #2	W14 x 30 #2	W18 x 35 #3	W18 x 40 #3	W21 x 44 #3
	8 ft	-	W8 x 10 #3	W6 x 12 #2	W12 x 14 #3	W6 x 15 #2	W6 x 15 #2	W6 x 15 #2S	W8 x 18 #2	W8 x 21 #2S	W10 x 22 #2	W10 x 22 #2	W10 x 26 #2	W12 x 26 #2	W14 x 30 #2	W18 x 35 #3	W18 x 40 #2	W21 x 44 #3	-	-
	9 ft	-	W6 x 12 #2	W6 x 12 #2	W6 x 15 #2	W6 x 15 #1	W8 x 18 #2	W6 x 20 #1S	W8 x 21 #2S	W10 x 22 #2	W10 x 26 #2	W10 x 26 #2	W12 x 30 #2	W14 x 34 #2	W18 x 40 #2	W21 x 44 #3	-	-	-	-
	10 ft	-	W6 x 12 #2	W6 x 15 #2	W6 x 15 #2	W6 x 15 #1	W8 x 18 #2	W6 x 20 #1S	W8 x 21 #1	W10 x 22 #2	W10 x 26 #2	W10 x 26 #2	W12 x 30 #2	W14 x 30 #2	W16 x 36 #2	W18 x 40 #2	W21 x 44 #2	-	-	-
	11 ft	-	W6 x 15 #2	W6 x 15 #1	W6 x 15 #1	W8 x 18 #2	W6 x 20 #1	W8 x 21 #1	W10 x 22 #2	W10 x 26 #2	W10 x 26 #1	W10 x 30 #1	W14 x 30 #2	W16 x 36 #2	W18 x 40 #2	W21 x 44 #2	-	-	-	-
	12 ft	-	W6 x 15 #1	W6 x 15 #1	W6 x 16 #1	W8 x 18 #1	W6 x 20 #1	W8 x 21 #1	W10 x 26 #2	W10 x 26 #1	W10 x 30 #1	W12 x 30 #2	W14 x 34 #2	W18 x 40 #2	W21 x 44 #2	-	-	-	-	-
	13 ft	-	W6 x 15 #1	W6 x 15 #1	W8 x 18 #1	W6 x 20 #1	W8 x 21 #1	W10 x 26 #1	W10 x 26 #1	W12 x 30 #2	W14 x 34 #2	W16 x 36 #2	W18 x 40 #2	-	-	-	-	-	-	-
	14 ft	-	W6 x 15 #1	W8 x 18 #1	W6 x 20 #1	W6 x 20 #1	W8 x 24 #1	W10 x 26 #1	W10 x 26 #1	W10 x 30 #1	W12 x 30 #1	W16 x 36 #2	W18 x 40 #2	-	-	-	-	-	-	-
	15 ft	-	W6 x 16 #1	W8 x 18 #1	W6 x 20 #1	W8 x 24 #1	W10 x 26 #1	W10 x 26 #1	W10 x 30 #1	W12 x 30 #1	W14 x 34 #1	-	-	-	-	-	-	-	-	-
	16 ft	-	W8 x 18 #1	W6 x 20 #1	W8 x 24 #1	W10 x 26 #1	W10 x 30 #1	W10 x 30 #1	W14 x 34 #1	-	-	-	-	-	-	-	-	-	-	-

REV.	DATE	REVISION DESCRIPTION	SHEET NO.
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-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
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THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.

Plotted Date: 4/28/2014

DESIGNER/DRAFTER: BKC
CHECKED BY: JRH
SCALE AS NOTED

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: ...\SB..Breakaway..SIgnpost..BSM2..PostSelectionTable..1.dgn

SIGNATURE/ BLOCK:

DESIGNED BY:
LUCHS CONSULTING ENGINEERS, LLC
89 COLONY STREET
MERIDEN, CT 06451

PROJECT TITLE:
ROUTE 8
INTERCHANGE 18
NEW NORTHBOUND ON-RAMP

TOWN: ANSONIA AND DERBY

DRAWING TITLE:
BREAKAWAY SIGN SUPPORTS
POST SELECTION TABLE 1

PROJECT NO. 36-179
DRAWING NO. BSM-2
SHEET NO. 05.37

POST SELECTION TABLE 2

W	L	H (Sign Height + Crown Height)																	
		4 ft	5 ft	6 ft	7 ft	8 ft	9 ft	10 ft	11 ft	12 ft	13 ft	14 ft	15 ft	16 ft	17 ft	18 ft	19 ft	20 ft	21 ft	22 ft
16 ft	7 ft	-	W6 x 9 #2	W6 x 12 #2	W6 x 12 #2	W6 x 15 #2	W6 x 15 #2	W6 x 15 #2S	W8 x 18 #2	W8 x 18 #2S	W10 x 22 #2	W10 x 22 #2	W10 x 26 #2	W10 x 26 #2S	W12 x 26 #2S	W18 x 35 #3	W18 x 35 #3	W21 x 44 #3	-	-
	8 ft	-	W8 x 10 #3	W6 x 12 #2	W6 x 15 #2	W6 x 15 #2	W6 x 15 #2	W6 x 16 #2S	W8 x 18 #2	W8 x 21 #2S	W10 x 22 #2	W10 x 26 #2	W10 x 26 #2	W12 x 26 #2	W14 x 30 #2	W18 x 35 #3	W21 x 44 #3	-	-	-
	9 ft	-	W6 x 12 #2	W6 x 15 #2	W6 x 15 #2	W6 x 15 #2	W6 x 16 #1	W8 x 18 #2	W8 x 21 #2	W10 x 22 #2	W10 x 26 #2	W10 x 26 #2	W12 x 26 #2	W14 x 30 #2	W18 x 35 #2	W18 x 40 #2	W21 x 44 #3	-	-	-
	10 ft	-	W6 x 12 #2	W6 x 15 #2	W6 x 15 #2	W6 x 16 #1	W8 x 18 #2	W8 x 21 #2	W8 x 21 #1	W10 x 26 #2	W10 x 26 #2	W12 x 26 #2	W14 x 30 #2	W16 x 36 #2	W18 x 40 #2	W21 x 44 #3	-	-	-	-
	11 ft	-	W6 x 15 #2	W6 x 15 #1	W6 x 15 #1	W8 x 18 #2	W6 x 20 #1	W8 x 21 #1	W10 x 26 #2	W10 x 26 #1	W12 x 30 #2	W14 x 34 #2	W16 x 36 #2	W18 x 40 #2	W21 x 44 #3	-	-	-	-	-
	12 ft	-	W6 x 15 #1	W6 x 15 #1	W8 x 18 #2	W6 x 20 #1	W8 x 21 #1	W10 x 26 #2	W10 x 26 #2	W10 x 26 #1	W12 x 30 #2	W14 x 34 #2	W16 x 36 #2	W18 x 40 #2	-	-	-	-	-	-
	13 ft	-	W6 x 15 #1	W6 x 16 #1	W6 x 20 #1	W6 x 20 #1	W10 x 22 #2	W10 x 26 #1	W10 x 26 #1	W10 x 30 #1	W14 x 34 #2	W16 x 36 #2	W18 x 40 #2	-	-	-	-	-	-	-
	14 ft	-	W6 x 15 #1	W8 x 18 #1	W6 x 20 #1	W8 x 21 #1	W10 x 26 #1	W10 x 26 #1	W10 x 30 #1	W12 x 30 #1	W14 x 34 #2	W18 x 40 #2	-	-	-	-	-	-	-	-
	15 ft	-	W8 x 18 #1	W6 x 20 #1	W8 x 24 #1	W10 x 26 #1	W10 x 26 #1	W10 x 30 #1	W10 x 30 #1	W14 x 34 #2	W16 x 36 #2	-	-	-	-	-	-	-	-	-
	16 ft	-	W8 x 18 #1	W6 x 20 #1	W8 x 24 #1	W10 x 26 #1	W10 x 26 #1	W10 x 30 #1	W12 x 30 #1	W14 x 34 #1	-	-	-	-	-	-	-	-	-	-
17 ft	7 ft	-	W6 x 9 #2	W6 x 12 #2	W6 x 12 #2	W6 x 15 #2	W6 x 15 #2	W6 x 15 #2S	W8 x 18 #2S	W8 x 21 #2S	W10 x 22 #2	W10 x 22 #2	W10 x 26 #2S	W12 x 26 #2	W14 x 30 #2	W18 x 35 #3	W21 x 44 #3	-	-	-
	8 ft	-	W6 x 12 #2	W6 x 12 #2	W6 x 15 #2	W6 x 15 #2	W6 x 15 #2	W8 x 18 #2	W8 x 21 #2S	W10 x 22 #2	W10 x 22 #2	W10 x 26 #2	W12 x 26 #2	W14 x 30 #2	W18 x 35 #3	W18 x 40 #3	W21 x 44 #3	-	-	-
	9 ft	-	W6 x 12 #2	W6 x 15 #2	W6 x 15 #2	W6 x 15 #2	W8 x 18 #2	W6 x 20 #1S	W8 x 21 #2S	W10 x 22 #2	W10 x 26 #2	W10 x 26 #2	W14 x 30 #2	W18 x 35 #3	W18 x 40 #2	W21 x 44 #3	-	-	-	-
	10 ft	-	W6 x 12 #2	W6 x 15 #2	W6 x 15 #1	W8 x 18 #2	W6 x 20 #1	W8 x 21 #2	W10 x 22 #2	W10 x 26 #2	W10 x 26 #2	W12 x 30 #2	W14 x 34 #2	W18 x 40 #2	W21 x 44 #3	-	-	-	-	-
	11 ft	-	W6 x 15 #2	W6 x 15 #1	W6 x 16 #1	W8 x 18 #2	W8 x 21 #2	W10 x 22 #2	W10 x 26 #2	W10 x 26 #2	W12 x 30 #2	W14 x 30 #2	W16 x 36 #2	W18 x 40 #2	W21 x 44 #3	-	-	-	-	-
	12 ft	-	W6 x 15 #1	W6 x 15 #1	W8 x 18 #2	W6 x 20 #1	W8 x 21 #1	W10 x 26 #2	W10 x 26 #2	W10 x 26 #1	W12 x 30 #2	W14 x 30 #2	W16 x 36 #2	W18 x 40 #2	W21 x 44 #2	-	-	-	-	-
	13 ft	-	W6 x 15 #1	W8 x 18 #1	W6 x 20 #1	W8 x 21 #1	W10 x 26 #2	W10 x 26 #1	W10 x 26 #1	W12 x 30 #2	W14 x 34 #2	W16 x 36 #2	W18 x 40 #2	W21 x 44 #2	-	-	-	-	-	-
	14 ft	-	W6 x 15 #1	W8 x 18 #1	W6 x 20 #1	W8 x 24 #1	W10 x 26 #1	W10 x 26 #1	W12 x 30 #2	W14 x 34 #2	W16 x 36 #2	W18 x 40 #2	-	-	-	-	-	-	-	-
	15 ft	-	W8 x 18 #1	W6 x 20 #1	W8 x 21 #1	W10 x 26 #1	W10 x 26 #1	W10 x 30 #1	W12 x 30 #1	W16 x 36 #2	-	-	-	-	-	-	-	-	-	-
	16 ft	-	W6 x 20 #1	W6 x 20 #1	W8 x 24 #1	W10 x 26 #1	W10 x 30 #1	W12 x 30 #1	W14 x 34 #1	-	-	-	-	-	-	-	-	-	-	-
18 ft	7 ft	-	W8 x 10 #3	W6 x 12 #2	W12 x 14 #3	W6 x 15 #2	W6 x 15 #2S	W6 x 15 #2S	W8 x 18 #2S	W8 x 21 #2S	W10 x 22 #2	W10 x 26 #2	W12 x 26 #2	W14 x 30 #2	W18 x 35 #3	W18 x 35 #3	W21 x 44 #3	-	-	-
	8 ft	-	W6 x 12 #2	W6 x 12 #2	W6 x 15 #2	W6 x 15 #2	W6 x 15 #2S	W8 x 18 #2	W8 x 21 #2S	W10 x 22 #2	W10 x 26 #2	W10 x 26 #2	W12 x 26 #2	W18 x 35 #3	W18 x 35 #3	W21 x 44 #3	-	-	-	-
	9 ft	-	W6 x 12 #2	W6 x 15 #2	W6 x 15 #2	W6 x 15 #2	W8 x 18 #2	W8 x 21 #2	W10 x 22 #2	W10 x 26 #2	W10 x 26 #2	W12 x 26 #2	W14 x 30 #2	W18 x 35 #3	W21 x 44 #3	-	-	-	-	-
	10 ft	-	W6 x 15 #2	W6 x 15 #1	W6 x 15 #1	W8 x 18 #2	W8 x 21 #2	W10 x 26 #2	W10 x 26 #2	W10 x 26 #2	W12 x 30 #2	W14 x 30 #2	W18 x 40 #2	W21 x 44 #3	-	-	-	-	-	-
	11 ft	-	W6 x 15 #2	W6 x 15 #1	W8 x 18 #2	W6 x 20 #1	W8 x 21 #2	W10 x 26 #2	W10 x 26 #2	W10 x 26 #2	W12 x 30 #2	W16 x 36 #2	W18 x 40 #2	W21 x 44 #3	-	-	-	-	-	-
	12 ft	-	W6 x 15 #1	W6 x 15 #1	W8 x 18 #2	W8 x 21 #1	W10 x 22 #2	W10 x 26 #2	W10 x 26 #1	W12 x 30 #2	W14 x 34 #2	W16 x 36 #2	W18 x 40 #2	W21 x 44 #3	-	-	-	-	-	-
	13 ft	-	W6 x 15 #1	W8 x 18 #1	W6 x 20 #1	W8 x 21 #1	W10 x 26 #2	W10 x 26 #1	W10 x 30 #1	W14 x 34 #2	W16 x 36 #2	W18 x 40 #2	W21 x 44 #2	-	-	-	-	-	-	-
	14 ft	-	W6 x 16 #1	W6 x 20 #1	W6 x 20 #1	W10 x 26 #1	W10 x 26 #1	W10 x 30 #1	W12 x 30 #2	W14 x 34 #2	W16 x 36 #2	W18 x 40 #2	-	-	-	-	-	-	-	-
	15 ft	-	W8 x 18 #1	W6 x 20 #1	W8 x 24 #1	W10 x 26 #1	W10 x 26 #1	W12 x 30 #2	W12 x 30 #1	W16 x 36 #2	-	-	-	-	-	-	-	-	-	-
	16 ft	-	W6 x 20 #1	W6 x 20 #1	W10 x 26 #1	W10 x 26 #1	W10 x 30 #1	W12 x 30 #1	W16 x 36 #2	-	-	-	-	-	-	-	-	-	-	-
19 ft	7 ft	-	-	W6 x 12 #2	W12 x 14 #3	W6 x 15 #2	W6 x 15 #2S	W8 x 18 #2	W8 x 18 #2S	W10 x 22 #2	W10 x 22 #2	W10 x 26 #2	W12 x 26 #2	W14 x 30 #2	W18 x 35 #3	W21 x 44 #3	-	-	-	-
	8 ft	-	-	W12 x 14 #3	W6 x 15 #2	W6 x 15 #2	W6 x 16 #2S	W8 x 18 #2	W10 x 22 #2	W10 x 22 #2	W10 x 26 #2	W12 x 26 #2	W14 x 30 #2	W18 x 35 #3	W21 x 44 #3	W21 x 44 #3	-	-	-	-
	9 ft	-	-	W6 x 15 #2	W6 x 15 #2	W6 x 16 #2	W8 x 18 #2	W8 x 21 #2	W10 x 22 #2	W10 x 26 #2	W10 x 26 #2	W12 x 26 #2	W14 x 30 #2	W18 x 35 #3	W18 x 35 #3	W21 x 44 #3	-	-	-	-
	10 ft	-	-	W6 x 15 #2	W6 x 15 #1	W8 x 18 #2	W8 x 21 #2	W10 x 22 #2	W10 x 26 #2	W10 x 26 #2	W12 x 26 #2	W18 x 35 #3	W18 x 40 #3	W21 x 44 #3	-	-	-	-	-	-
	11 ft	-	-	W6 x 15 #1	W8 x 18 #2	W6 x 20 #1	W8 x 21 #1	W10 x 26 #2	W10 x 26 #2	W12 x 26 #2	W14 x 30 #2	W16 x 36 #2	W21 x 44 #3	-	-	-	-	-	-	-
	12 ft	-	-	W8 x 18 #2	W6 x 20 #1	W8 x 21 #1	W10 x 26 #2	W10 x 26 #2	W10 x 26 #1	W14 x 30 #2	W16 x 36 #2	W18 x 40 #2	W21 x 44 #3	-	-	-	-	-	-	-
	13 ft	-	-	W8 x 18 #1	W6 x 20 #1	W10 x 22 #2	W10 x 26 #2	W10 x 26 #1	W12 x 30 #2	W16 x 36 #2	W18 x 40 #2	W21 x 44 #2	-	-	-	-	-	-	-	-
	14 ft	-	-	W6 x 20 #1	W8 x 21 #1	W10 x 26 #1	W10 x 26 #1	W12 x 30 #2	W14 x 34 #2	W16 x 36 #2	-	-	-	-	-	-	-	-	-	-
	15 ft	-	-	W6 x 20 #1	W8 x 24 #1	W10 x 26 #1	W10 x 30 #1	W12 x 30 #1	W16 x 36 #2	-	-	-	-	-	-	-	-	-	-	-
	16 ft	-	-	W6 x 20 #1	W10 x 26 #1	W10 x 26 #1	W10 x 30 #1	W14 x 34 #2	-	-	-	-	-	-	-	-	-	-	-	-
20 ft	7 ft	-	-	W6 x 12 #2	W6 x 15 #2	W6 x 15 #2	W6 x 15 #2S	W8 x 18 #2S	W8 x 21 #2S	W10 x 22 #2	W10 x 22 #2	W12 x 26 #2	W14 x 30 #3	W16 x 31 #3	W18 x 35 #3	W21 x 44 #3	-	-	-	-
	8 ft	-	-	W6 x 15 #2	W6 x 15 #2	W6 x 15 #2	W8 x 18 #2	W8 x 21 #2S	W10 x 22 #2	W10 x 22 #2	W10 x 26 #2	W12 x 26 #2	W18 x 35 #3	W18 x 35 #3	W21 x 44 #3	-	-	-	-	-
	9 ft	-	-	W6 x 15 #2	W6 x 15 #2	W8 x 18 #2	W8 x 21 #2	W10 x 22 #2	W10 x 22 #2	W10 x 26 #2	W12 x 26 #2	W14 x 34 #2	W18 x 35 #3	W21 x 44 #3	-	-	-	-	-	-
	10 ft	-	-	W6 x 15 #2	W6 x 16 #1	W8 x 18 #2	W8 x 21 #2	W10 x 22 #2	W10 x 26 #2	W12 x 26 #2	W14 x 30 #2	W18 x 35 #3	W21 x 44 #3	W21 x 44 #3	-	-	-	-	-	-
	11 ft	-	-	W6 x 15 #1	W8 x 18 #2	W8 x 21 #2	W10 x 22 #2	W10 x 26 #2	W10 x 26 #2	W12 x 26 #2	W12 x 30 #2	W18 x 35 #2	W18 x 40 #2	W21 x 44 #3	-	-	-	-	-	-
	12 ft	-	-	W8 x 18 #2	W6 x 20 #1	W8 x 21 #1	W10 x 26 #2	W10 x 26 #2	W12 x 30 #2	W14 x 30 #2	W18 x 40 #2	W21 x 44 #3	-	-	-	-	-	-	-	-
	13 ft	-	-	W6 x 20 #1	W8 x 21 #1	W10 x 26 #2	W10 x 26 #1	W12 x 30 #2	W14 x 34 #2	W18 x 40 #2	-	-	-	-	-	-	-	-	-	-
	14 ft	-	-	W6 x 20 #1	W10 x 26 #2	W10 x 26 #1	W12 x 30 #2	W14 x 34 #2	W18 x 40 #2	-	-	-	-	-	-	-	-	-	-	-
	15 ft	-	-	W10 x 22 #1	W10 x 26 #1	W10 x 30 #1	W12 x 30 #2	W16 x 36 #2	-	-	-	-	-	-	-	-	-	-	-	-
	16 ft	-	-	W10 x 26 #1	W10 x 26 #1	W10 x 30 #1	W14 x 34 #2	-	-	-	-	-	-	-	-	-	-	-	-	-
21 ft	7 ft	-	-	W6 x 12 #2	W6 x 15 #2	W6 x 15 #2	W6 x 16 #2S	W8 x 18 #2S	W10 x 22 #2	W10 x 22 #2	W10 x 26 #2	W12 x 26 #2	W16 x 31 #3	W18 x 35 #3	W21 x 44 #3	-	-	-	-	-
	8 ft	-	-	W6 x 15 #2	W6 x 15 #2	W6 x 15 #2	W8 x 18 #2	W8 x 21 #2S	W10 x 22 #2	W10 x 26 #2	W12 x 26 #2	W14 x 30 #2	W18 x 35 #3	W18 x 35 #3	W21 x 44 #3	-	-	-	-	-
	9 ft	-	-	W6 x 15 #2	W6 x 15 #2	W8 x 18 #2	W8 x 21 #2	W10 x 22 #2	W10 x 26 #2	W12 x 26 #2	W14 x 30 #2	W18 x 35 #3	W18 x 35 #3	W21 x 44 #3	-	-	-	-	-	-
	10 ft	-	-	W6 x 15 #2	W8 x 18 #2	W6 x 20 #1	W10 x 22 #2	W10 x 26 #2	W10 x 26 #2	W12 x 26 #2	W18 x 35 #3	W21 x 44 #3	W21 x 44 #3	-	-	-	-	-	-	-
	11 ft	-	-	W6 x 15 #1	W8 x 18 #2	W8 x 21 #2	W10 x 22 #2	W10 x 26 #2	W10 x 26 #2	W12 x 30 #2	W18 x 35 #2	W18 x 40 #2	W21 x 44 #3	-	-	-	-	-	-	-
	12 ft	-	-	W8 x 18 #2	W6 x 20 #1	W8 x 21 #1	W10 x 26 #2	W10 x 26 #2	W12 x 30 #2	W14 x 30 #2	W18 x 40 #2	W21 x 44 #3	-	-	-	-	-	-	-	-
	13 ft	-	-	W6 x 20 #1	W8 x 21 #1	W10 x 26 #2	W10 x 26 #1	W12 x 30 #2	W14 x 34 #2	W18 x 40 #2	-	-	-	-	-	-	-	-	-	-
	14 ft	-	-	W6 x 20 #1	W10 x 26 #2	W10 x 26 #1	W12 x 30 #2	W14 x 34 #2	W18 x 40 #2	-	-	-	-	-	-	-	-	-	-	-
	15 ft	-	-	W8 x 21 #1	W10 x 26 #1	W10 x 26 #1	W12 x 30 #2	W16 x 36 #2	-	-	-	-	-	-	-	-	-	-	-	-
	16 ft	-	-	W8 x 24 #1	W10 x 26 #1	W10 x 30 #1	W14 x 34 #2	W16 x 36 #2	-	-	-	-	-	-	-	-	-	-	-	-
22 ft	7 ft	-	-	W6 x 12 #2	W6 x 15 #2	W6 x 15 #2	W8 x 18 #2	W8 x 18 #2S	W10 x 22 #2	W10 x 22 #2	W12 x 26 #3	W16 x 26 #3	W16 x 31 #3	W18 x 35 #3	W21 x 44 #3	-	-	-	-	-
	8 ft	-	-	W6 x 15 #2	W6 x 15 #2	W6 x 15 #2	W8 x 18 #2	W10 x 22 #2	W10 x 22 #2	W10 x 26 #2	W12 x 26 #2	W16 x 31 #3	W18 x 35 #3	W21 x 44 #3	-	-	-	-	-	-
	9 ft	-	-	W6 x 15 #2	W6 x 15 #2	W8 x 18 #2	W8 x 21 #2	W10 x 22 #2	W10 x 26 #2	W12 x 26 #2	W14 x 30 #2	W18 x 35 #3	W21 x 44 #3	-	-	-	-	-	-	-
	10 ft	-	-	W6 x 15 #2	W8 x 18 #2	W8 x 21 #2	W10 x 22 #2	W10 x 26 #2	W12 x 26 #2	W14 x 30 #2	W18 x 35 #3	W21 x 44 #3	-	-	-	-	-	-	-	-
	11 ft	-	-	W6 x 16 #1	W6 x 20 #1	W8 x 21 #2	W10 x 26 #2	W10 x 26 #2	W12 x 26 #2	W18 x 35 #3	W18 x 40 #3	W21 x 44 #3	-	-	-	-	-	-	-	-
	12 ft	-	-	W8 x 18 #2	W8 x 21 #2	W10 x 22 #2	W10 x 26 #2	W12 x 26 #2	W14 x 30 #2	W18 x 40 #2	W21 x 44 #3	-	-	-	-	-	-	-	-	-
	13 ft	-	-	W6 x 20 #1	W8 x 21 #1	W10 x 26 #2	W10 x 26 #1	W12 x 30 #2	W16 x 36 #2	W18 x 40 #2	-	-	-	-	-	-	-	-	-	-
	14 ft	-	-	W6 x 20 #1	W10 x 26 #2	W10 x 26 #1	W12 x 30 #2	W14 x 34 #2	W18 x 40 #2	-	-	-	-	-	-	-	-	-	-	-
	15 ft	-	-	W10 x 22 #1	W10 x 26 #1	W10 x 30 #1	W12 x 30 #2	W16 x 36 #2	-	-	-	-	-	-	-	-	-	-	-	-
	16 ft	-	-	W10 x 26 #1	W10 x 26 #1	W10 x 30 #1	W14 x 34 #2	-	-	-	-	-	-	-	-	-	-	-	-	-

REV.	DATE	REVISION DESCRIPTION	SHEET NO.
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THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.

Plotted Date: 4/28/2014

DESIGNER/DRAFTER: BKC
CHECKED BY: JRH
SCALE AS NOTED

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: ...\SB_Breakaway_Signpost_BSM3_PostSelectionTable_2.dgn

SIGNATURE/ BLOCK:

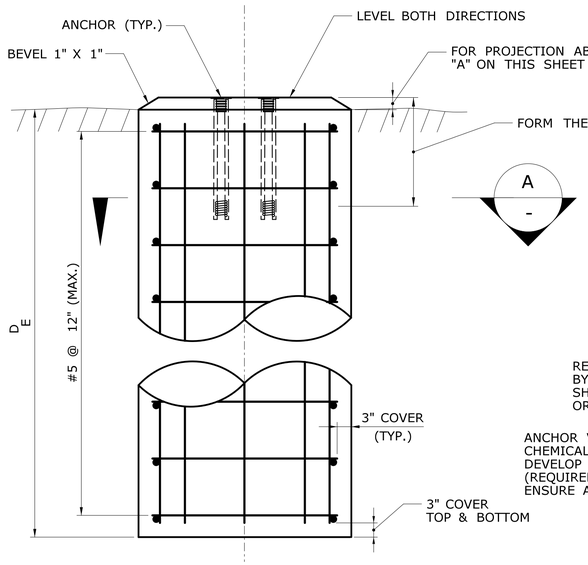
DESIGNED BY:
LUCHS CONSULTING ENGINEERS, LLC
89 COLONY STREET
MERIDEN, CT 06451

PROJECT TITLE:
ROUTE 8
INTERCHANGE 18
NEW NORTHBOUND ON-RAMP

TOWN: ANSONIA AND DERBY

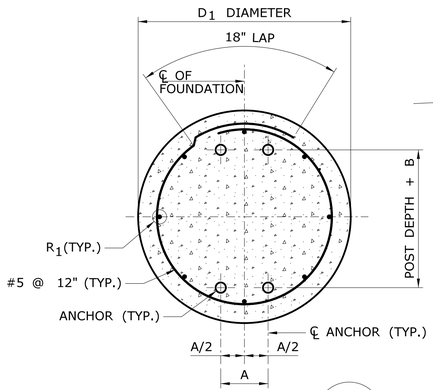
DRAWING TITLE:
BREAKAWAY SIGN SUPPORTS
POST SELECTION TABLE 2

PROJECT NO. 36-179
DRAWING NO. BSM-3
SHEET NO. 05.38

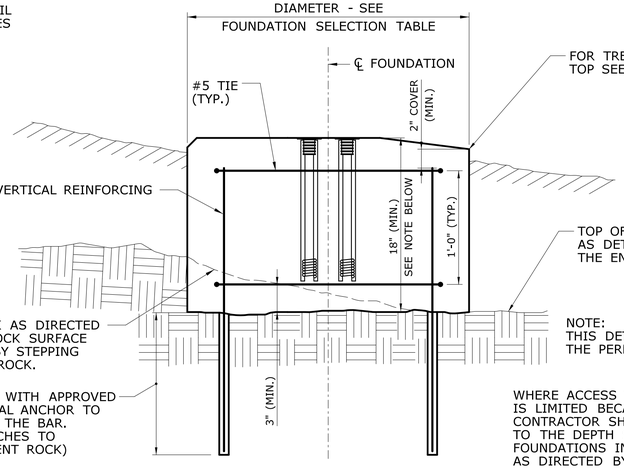


TYPICAL SECTION SIGN SUPPORT FOUNDATION IN EARTH

SCALE: $\frac{3}{4}$" = 1'-0"



SECTION DRILLED FOUNDATION

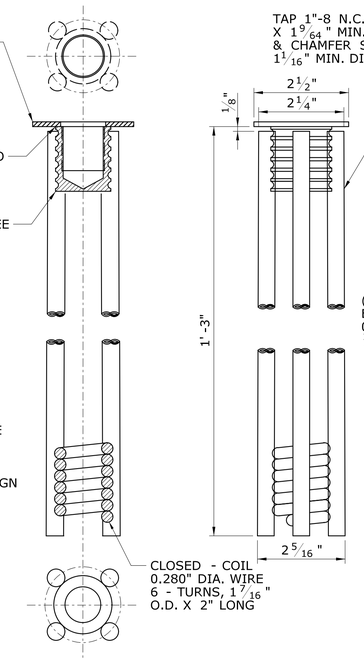


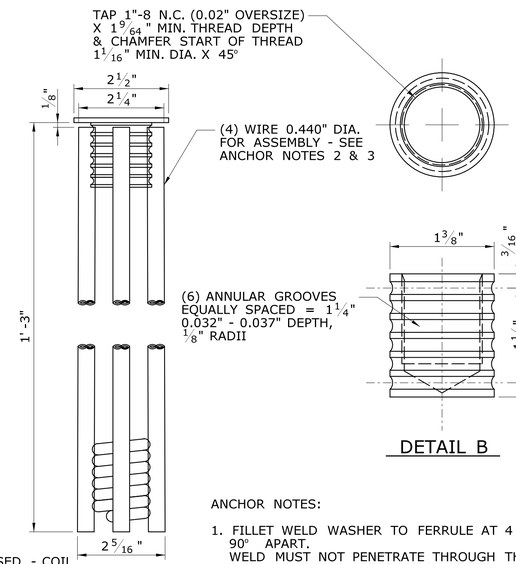
TYPICAL SECTION SIGN SUPPORT FOUNDATION IN ROCK

SCALE: $1\frac{1}{2}$" = 1'-0"

NOTE:
THIS DETAIL MAY BE USED ONLY WITH THE PERMISSION OF THE ENGINEER.

WHERE ACCESS TO THE BOTTOM OF THE HOLE IS LIMITED BECAUSE OF DEPTH TO ROCK, THE CONTRACTOR SHALL CREATE A ROCK SOCKET TO THE DEPTH SPECIFIED ON THE PLANS FOR FOUNDATIONS IN EARTH OR RELOCATE THE SIGN AS DIRECTED BY THE ENGINEER

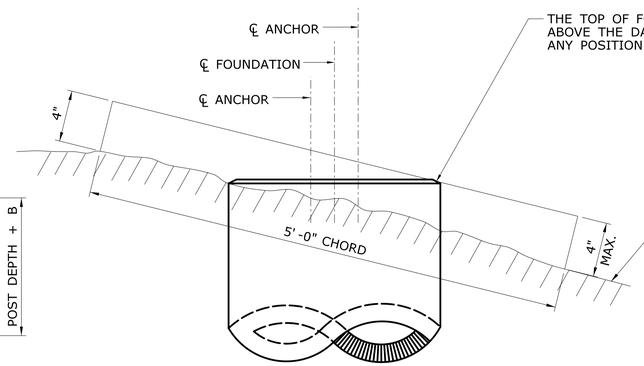




DETAIL B

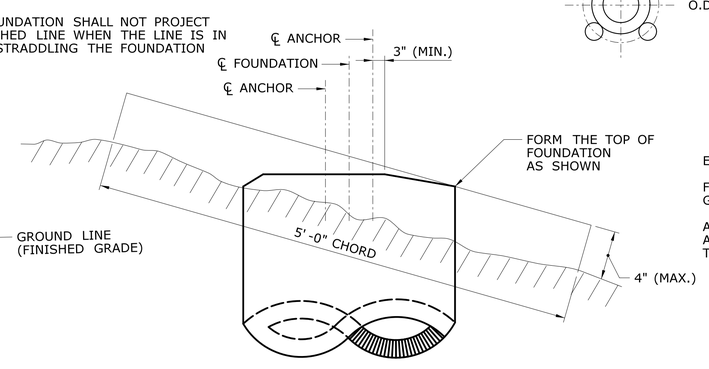
ANCHOR NOTES:

1. FILLET WELD WASHER TO FERRULE AT 4 PLACES 90° APART. WELD MUST NOT PENETRATE THROUGH THE WASHER. WASHER MUST BE PERPENDICULAR TO THE FERRULE CENTER LINE.
2. WIRES (4) TO BE PERCUSSION WELDED TO FERRULE AND TO THE CLOSED COIL.
3. WELD MUST NOT PENETRATE TO FERRULE INTERIOR THREADS.
4. WIRE TO BE DRAWN PER ASTM A510.
5. CHEMICAL & PHYSICAL CERTIFICATION SHOULD ACCOMPANY THE MATERIAL.
6. CERTIFICATION SHOULD EXPLICITLY INDICATE THE MATERIAL TO BE DOMESTIC.
7. TOLERANCES ON DECIMAL DIMENSIONS SHALL BE ± 0.004". ALL OTHER TOLERANCES SHALL BE ± 0.04", EXCEPT AS NOTED.



STANDARD FOUNDATION TOP

THE TOP OF FOUNDATION SHALL NOT PROJECT ABOVE THE DASHED LINE WHEN THE LINE IS IN ANY POSITION STRADDLING THE FOUNDATION



MODIFIED FOUNDATION TOP

(SEE FOUNDATION NOTE 3)

DETAIL A - PROJECTION OF FOUNDATION ABOVE GROUND

SELECTING A FOUNDATION:

ENTER THE "FOUNDATION SELECTION TABLE" WITH THE POST SIZE AND BRACKET NO. SELECTED FROM THE "POST SELECTION TABLE 1 OR 2" ON DWG BSM-2 OR DWG BSM-3. READ HORIZONTALLY ACROSS THE TABLE THE CORRESPONDING VALUES OF FOUNDATION DIAMETER, EMBEDMENT DEPTH, REINFORCING BAR SIZE, ANCHOR SPACING AND DIMENSION "B".

FOUNDATION SELECTION TABLE FOR BREAKAWAY SIGNS

POST SIZE	DIAMETER D_I (FT.)	DEPTH D_E (FT.)	REINF. STEEL R_I	ANCHOR SPACING A (IN.)	B (IN.) BRACKET NO. 1	B (IN.) BRACKET NO. 2	B (IN.) BRACKET NO. 3
W6 W8	2.5	8	8 - #5	3	$7\frac{15}{16}$	$8\frac{1}{16}$	$8\frac{1}{8}$
W10 W12	2.5	8	8 - #5	4	$7\frac{15}{16}$	$8\frac{1}{16}$	$8\frac{1}{8}$
W14 W16 W18 W21	3.25	8	8 - #6	4	$7\frac{15}{16}$	$8\frac{1}{16}$	$8\frac{1}{8}$

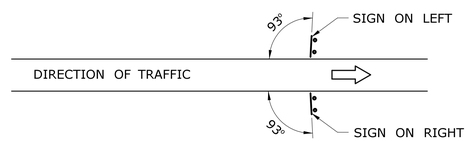
FOUNDATION NOTES

1. DETAIL A ILLUSTRATES THE METHOD USED TO MEASURE THE PROJECTION OF THE FOUNDATION ABOVE FINISHED GRADE. IT IS IMPORTANT THAT THE TOP OF THE FOUNDATION BE PLACED IN ACCORDANCE WITH THIS DETAIL.
2. THE TOP OF FOUNDATION SHALL BE CONSTRUCTED AS CLOSE TO THE FINISHED GRADE AS POSSIBLE, BUT SHOULD NOT BE COVERED BY SOIL.
3. USE A MODIFIED TOP WHERE PROJECTION LIMITS CANNOT BE MET WITH THE STANDARD TOP.
4. FOUNDATIONS SHALL BE PLACED AGAINST UNDISTURBED SOIL. WHERE ROCK IS ENCOUNTERED, THE CONTRACTOR MAY USE THE "SIGN SUPPORT FOUNDATION IN ROCK" DETAIL SHOWN ON THIS SHEET WITH THE PERMISSION OF THE ENGINEER.
5. IF UNSUITABLE SOIL IS ENCOUNTERED DURING EXCAVATION, THE ENGINEER SHALL BE NOTIFIED. AN ALTERNATE FOUNDATION DESIGN MAY BE SUPPLIED BY THE ENGINEER, OR THE SIGN MAY BE RELOCATED.
6. PLACEMENT OF FOUNDATIONS SHALL BE IN ACCORDANCE WITH "SIGN SUPPORT PLACEMENT DETAILS" ON THIS SHEET.
7. WHERE FOUNDATIONS ARE PLACED ON SLOPES STEEPER THAN 1V : 6H, GRADE AROUND THE FOUNDATIONS IN CONFORMANCE WITH DETAIL A.

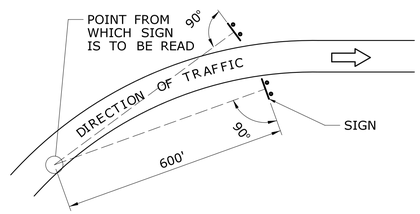
ERECTION NOTE:

FOR MAXIMUM EFFECTIVENESS AND TO ELIMINATE OR MINIMIZE SPECULAR GLARE, POSITION SIDE MOUNTED SIGNS AS FOLLOWS:

A. ON TANGENT SECTION, POSITION THE SIGN SUCH THAT THE VERTICAL AXIS IS PLUMB AND THE HORIZONTAL AXIS IS AT AN ANGLE OF 93° WITH THE TRAFFIC LANE WHICH THE SIGN SERVES (SEE DIAGRAM).



B. WHERE THE SIGN IS POSITIONED ON THE OUTSIDE OR INSIDE OF THE HORIZONTAL CURVE, THE SIGN FACE SHOULD BE ORIENTED 90° TO THE STRAIGHT LINE BETWEEN THE SIGN AND THE POINT FROM WHICH THE SIGN IS TO BE READ AT THE DISTANCE SHOWN.



SIGN SUPPORT PLACEMENT DETAILS

REV.	DATE	REVISION DESCRIPTION	SHEET NO.
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Plotted Date: 4/28/2014

DESIGNER/DRAFTER: **BKC**
CHECKED BY: **JRH**
SCALE AS NOTED

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: ...\SB_Breakaway_Signpost_BSM4_FoundationDet.dgn

SIGNATURE/ BLOCK:

DESIGNED BY:
LUCHS CONSULTING ENGINEERS, LLC
89 COLONY STREET
MERIDEN, CT 06451

PROJECT TITLE:
ROUTE 8
INTERCHANGE 18
NEW NORTHBOUND ON-RAMP

TOWN: **ANSONIA AND DERBY**

DRAWING TITLE: **BREAKAWAY SIGN SUPPORTS FOUNDATION DETAILS**

PROJECT NO. **36-179**
DRAWING NO. **BSM-4**
SHEET NO. **05.39**

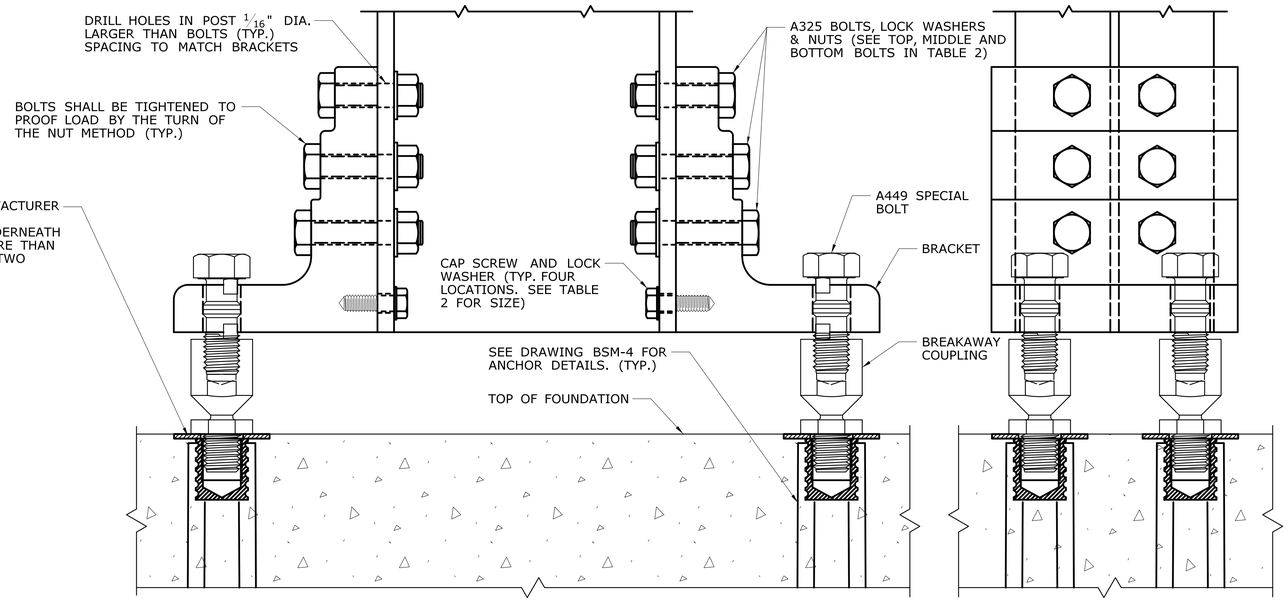
TABLE 1 - BRACKET DATA

POST SIZE	BRACKET TYPE	BRACKET WEIGHT (LBS)	DIMENSIONS (IN.)			HOLE DIAMETERS (IN.)			DIMENSIONS (IN.)				
									E BRACKET NO.			F	G
			A	B	C	D1	D2	D3	1	2	3		
W6, W8	B525	7 5/8	5 1/4	1 1/8	1 1/2	17/32	7/16	1/2" -13 UNC 1A	0.100	0.150	0.200	1 7/8	1/2
ALL OTHERS	B650	9 1/2	6 1/2	1 1/8	2	21/32	17/32	5/8"-11 UNC 1A	0.100	0.150	0.200	2 7/8	1/2

TABLE 2 - BRACKET BOLTS

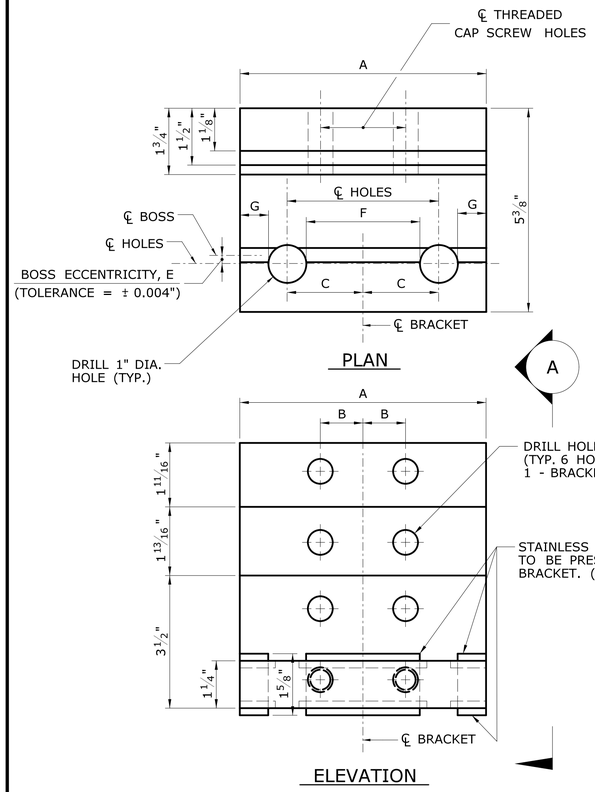
POST SIZE	BRACKET TYPE	BOLT AND CAP SCREW DIAMETER	BOLT LENTGH			CAP SCREW LENGTH	THREAD DESIGNATION (U.S. CUSTOMARY UNITS)	
			TOP	MIDDLE	BOTTOM		BOLT	CAP SCREW
W6, W8	B525	1/2	2 1/2	2 3/4	3	1 1/4	13 UNC	13 UNC
ALL OTHERS	B650	5/8	2 3/4	3	3 1/4	1 1/4	11 UNC	11 UNC

SHIM AS REQUIRED WITH MANUFACTURER SUPPLIED SHIMS (4 LOCATIONS). NO MORE THAN TWO SHIMS UNDERNEATH ANY ONE COUPLING AND NO MORE THAN THREE SHIMS UNDERNEATH ANY TWO COUPLINGS.

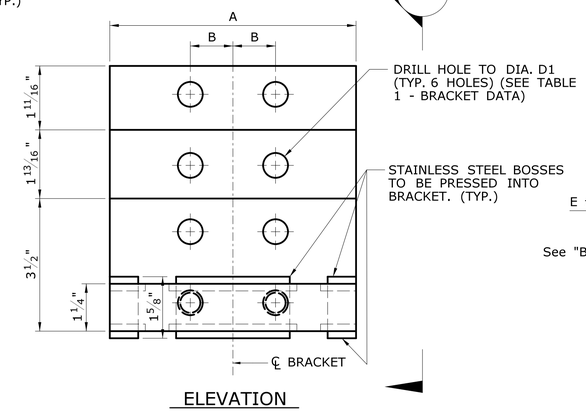


SIDE ELEVATION

FRONT ELEVATION



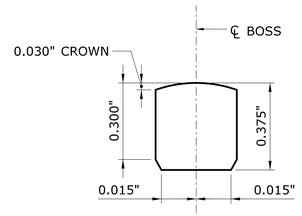
PLAN



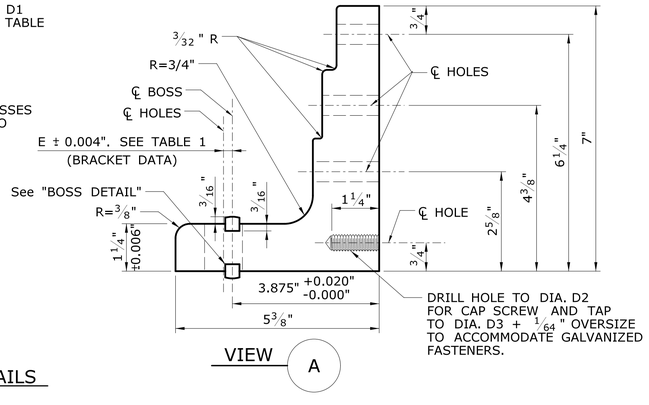
ELEVATION

BRACKET DETAILS

HALF SCALE

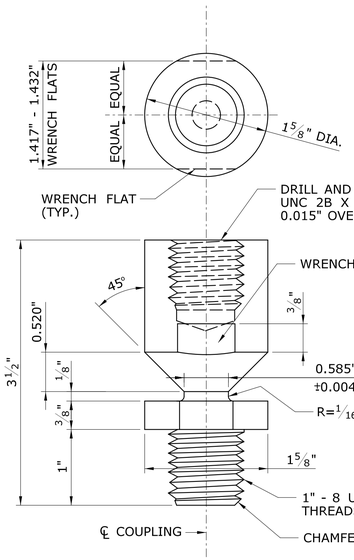


BOSS DETAIL



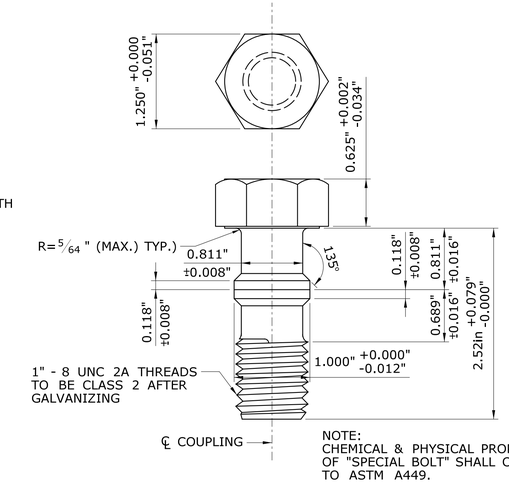
VIEW A

BRACKET ASSEMBLY DETAILS



NOTE:
TOLERANCES TO 1/32" EXCEPT AS NOTED

BREAKAWAY COUPLING



NOTE:
CHEMICAL & PHYSICAL PROPERTIES OF "SPECIAL BOLT" SHALL CONFORM TO ASTM A449.

SPECIAL BOLT

REV.	DATE	REVISION DESCRIPTION	SHEET NO.
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-	-	-	-
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Plotted Date: 4/28/2014

DESIGNER/DRAFTER: **BKC**

CHECKED BY: **JRH**

SCALE AS NOTED

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: ...\SB_Breakaway_Signpost_BSM5_BracketDet.dgn

SIGNATURE/ BLOCK:

DESIGNED BY:
LUCHS CONSULTING ENGINEERS, LLC
89 COLONY STREET
MERIDEN, CT 06451

PROJECT TITLE:
ROUTE 8
INTERCHANGE 18
NEW NORTHBOUND ON-RAMP

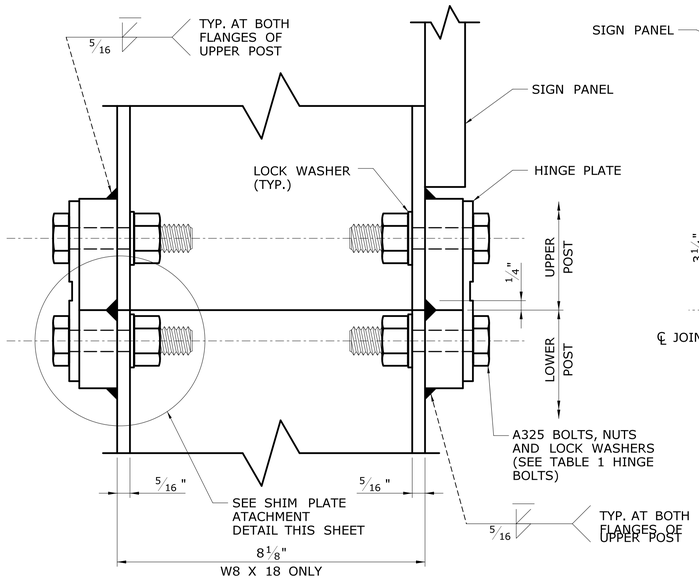
TOWN: **ANSONIA AND DERBY**

DRAWING TITLE: **BREAKAWAY SIGN SUPPORTS BRACKET DETAILS**

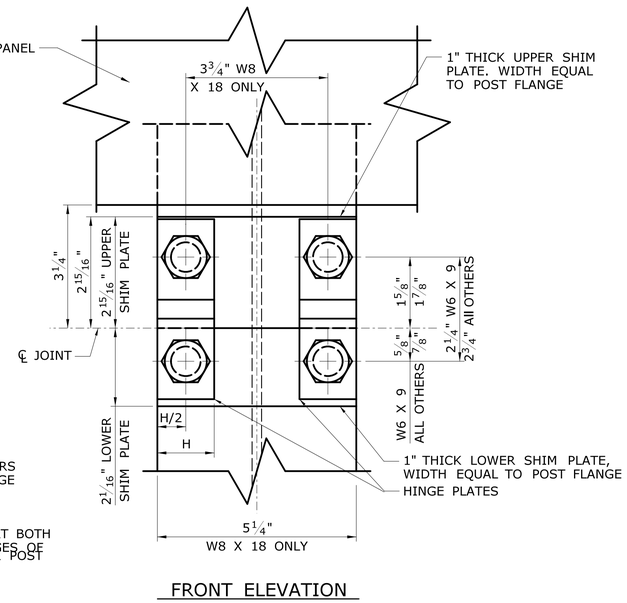
PROJECT NO. **36-179**

DRAWING NO. **BSM-5**

SHEET NO. **05.40**

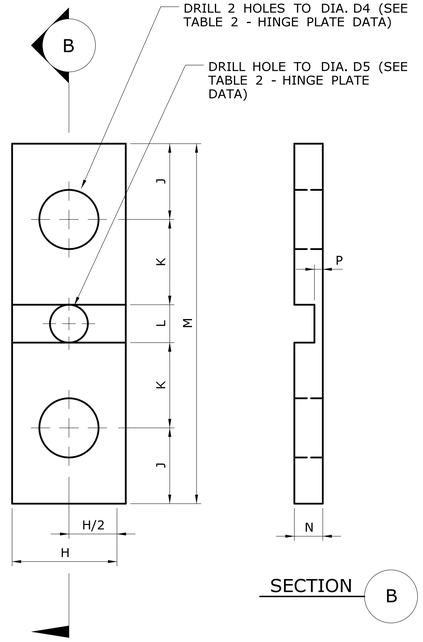


SIDE ELEVATION



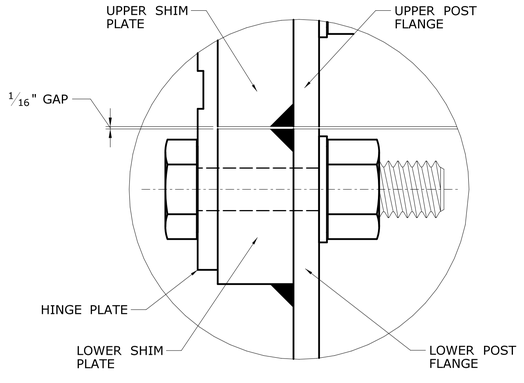
FRONT ELEVATION

WITH SHIM PLATE
SCALE: 1/2 (W8 X 18)

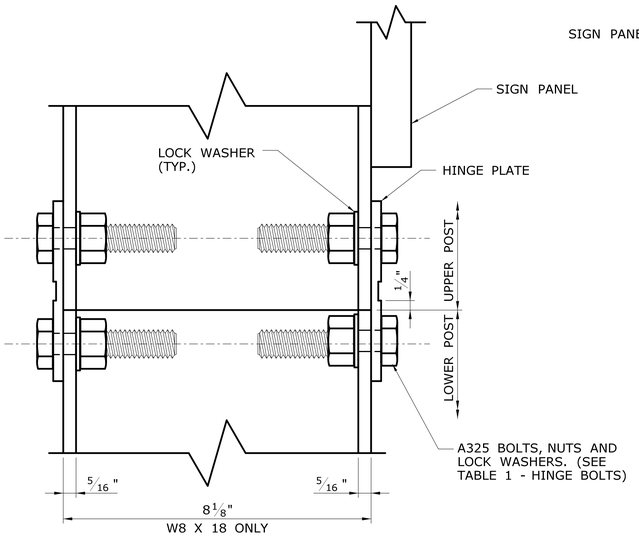


SECTION B

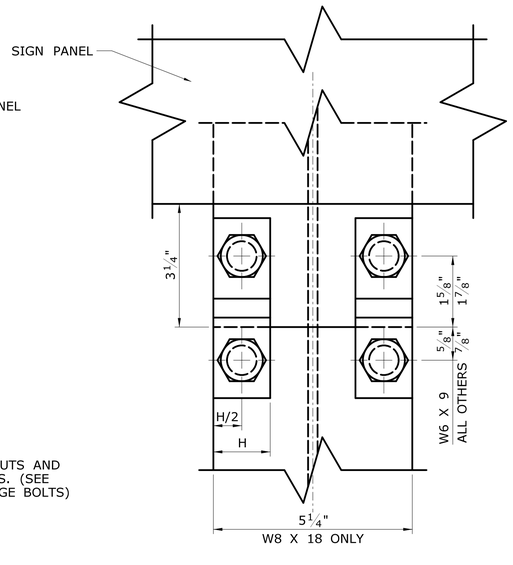
HINGE PLATE DETAILS
SCALE: FULL



SHIM PLATE ATTACHMENT DETAILS



SIDE ELEVATION



FRONT ELEVATION

WITHOUT SHIM PLATE
SCALE: 1/2 (W8 X 18)

TABLE 2 - HINGE PLATE DATA

POST SIZE	PLATE NO.	DIMENSIONS (IN.)							HOLE DIA. (IN.)	
		H	J	K	L	M	N	P	D4	D5
W6 X 9	1	1	3/4	7/8	1/2	3 3/4	15/64	0.071 ± 0.004	17/32	NONE
W6* AND W8	2	1 1/2	1	1 1/8	1/2	4 3/4	3/8	0.113 ± 0.004	25/32	1/2
ALL OTHERS	3	1 1/2	1	1 1/8	1/2	4 3/4	3/8	0.113 ± 0.004	25/32	NONE

* EXCLUDING W6 X 9

GENERAL NOTES

SPECIFICATIONS: CONNECTICUT DEPARTMENT OF TRANSPORTATION FORM 816 (2004), SUPPLEMENTAL SPECIFICATION DATED JANUARY 2011, AND SPECIAL PROVISIONS.
DESIGN SPECIFICATIONS: AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES 17TH EDITION DATED 2002, AND AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS (2009) WITH THE 2011 INTERIM SPECIFICATIONS.
DESIGN LOADS: THE DESIGN WIND SPEED IS 100 MPH, BASED ON A 10-YEAR MEAN RECURRENCE INTERVAL.
MATERIALS:

FOUNDATIONS: CONCRETE FOR FOUNDATIONS SHALL BE CLASS "A" CONCRETE.

REINFORCEMENT: REINFORCING STEEL SHALL CONFORM TO THE REQUIREMENTS OF ASTM A615, GRADE 60.
SIGN POSTS: STEEL FOR SIGN POSTS SHALL CONFORM TO THE REQUIREMENTS OF ASTM A709, GRADE 36, AND SHALL BE HOT DIP GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH ASTM A123. THE POST SHALL BE PERMANENTLY LABELED WITH THE POST SIZE ON THE WEB AT THE BOTTOM OF THE LOWER POST.
ANCHORS: THREADED FERRULES SHALL BE FABRICATED FROM TYPE 304 STAINLESS STEEL. RODS SHALL BE FABRICATED FROM STEEL CONFORMING TO AISI 1038. STEEL COILS SHALL CONFORM TO THE REQUIREMENTS OF AISI 1008. MINIMUM TENSILE STRENGTH OF 60,000 LBS.
SHIMS: 1" HORSESHOE SHIMS SHALL BE FABRICATED FROM 14 OR 18 GAUGE SHEET STEEL.

BREAKAWAY COUPLINGS: BREAKAWAY COUPLINGS SHALL BE MADE FROM ALLOY STEEL CONFORMING TO AMS 6378D WITH EXCEPTIONS TO DECARBURIZATION AND MACROSTRUCTURE CLAUSES OR AN EQUIVALENT MATERIAL, AND SHALL HAVE A MINIMUM TENSILE YIELD STRENGTH OF 130,000 PSI. THE COUPLING SHALL HAVE A MINIMUM TENSILE ULTIMATE STRENGTH OF 40,400 LBS. THE ROCKWELL HARDNESS SHALL BE C32 MINIMUM. COUPLINGS SHALL BE HOT DIP GALVANIZED IN ACCORDANCE WITH ASTM A153, CLEANED AND PHOSPHATED PER FEDERAL SPECIFICATION TT-C-490C, COATED, 0.002" - 0.004" THICK, USING MORTON POWDER COATINGS' 20-7037 BLACK POLYESTER POWDER OR EQUIVALENT.
CHIPPED AREAS OF THE COATED SURFACE SHALL BE REPAIRED. ALL THREADED SURFACES, AFTER COATING, SHALL BE CLEANED TO ALLOW THEM TO FUNCTION PROPERLY.

BRACKETS: BRACKETS SHALL BE MADE FROM ALUMINUM ALLOY 6061-T6 OR AN EQUIVALENT MATERIAL. THE LOAD CONCENTRATING MEMBER (BOSS) SHALL BE MADE FROM STAINLESS STEEL CONFORMING TO ASTM A582, TYPE 416 WITH ROCKWELL HARDNESS OF C33 - C45. LOCATION HOLES FOR THE BREAKAWAY COUPLING SHALL BE ACCURATELY POSITIONED RELATIVE TO THE LOAD CONCENTRATING MEMBER AND BRACKETS SHALL BE PERMANENTLY LABELED WITH THE BRACKET NUMBER TO REFLECT THE HOLE POSITIONING. SEE DWG. NO. BSM-5 FOR IDENTIFICATION OF BRACKETS BY NUMBER.

HINGE PLATES: HINGE PLATES SHALL BE MADE FROM ALLOY STEEL CONFORMING TO AISI 4130 OR AN EQUIVALENT MATERIAL AND SHALL BE GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH ASTM A123. THE HINGE PLATE SHALL HAVE A MINIMUM TENSILE YIELD STRENGTH OF 90,000 PSI AND MINIMUM TENSILE ULTIMATE STRENGTH AS FOLLOWS:

HI-1 7,100 LBS
HI-2 11,300 LBS
HI-3 17,000 LBS

BOLTS, NUTS AND WASHERS: UNLESS NOTED OTHERWISE, ALL BOLTS SHALL CONFORM TO THE REQUIREMENTS OF ASTM A325. SPECIAL BOLTS SHALL CONFORM TO ASTM A449. NUTS SHALL CONFORM TO THE REQUIREMENTS OF ASTM A563, GRADE DH. LOCKWASHERS SHALL CONFORM TO THE REQUIREMENTS OF ANSI B18-21-1. BOLTS, NUTS AND WASHERS SHALL BE GALVANIZED IN ACCORDANCE WITH THE REQUIREMENTS OF ASTM A153. SPECIAL BOLTS MAY BE MECHANICALLY GALVANIZED IN ACCORDANCE WITH THE REQUIREMENTS OF ASTM B695, CLASS 50.

CAP SCREWS: CAP SCREWS ATTACHING BRACKETS TO POSTS SHALL CONFORM TO THE REQUIREMENTS OF ASTM A307 AND SHALL BE HOT DIP GALVANIZED IN ACCORDANCE WITH ASTM A153.

BREAKAWAY HARDWARE: BREAKAWAY HARDWARE SHALL BE SUPPLIED AS COMPONENTS OF A CRASH-TESTED SYSTEM COMPLYING WITH THE GUIDELINES OF NCHRP REPORT 350 (RECOMMENDED PROCEDURES FOR THE SAFETY PERFORMANCE EVALUATION OF HIGHWAY FEATURES). THE MANUFACTURER SHALL SUBMIT TEST REPORTS TO FHWA FOR APPROVAL.

CERTIFICATION: THE CONTRACTOR SHALL PROVIDE A MATERIALS CERTIFICATE TO CERTIFY THAT THE MATERIAL AND COMPONENTS CONFORM TO THOSE SHOWN ON THE PLANS AND SPECIFICATIONS.

CHANGES: NO CHANGE IN DESIGN MATERIALS OR DETAIL ALTERATIONS WILL BE PERMITTED WITHOUT PRIOR APPROVAL BY THE ENGINEER.

INSTALLATION: INSTALLATION OF THE BREAKAWAY ASSEMBLY SHALL BE IN ACCORDANCE WITH THE RECOMMENDED PRACTICES OF THE SUPPLIER.

BASIS OF PAYMENT: THE COST OF FURNISHING AND INSTALLING THE BREAKAWAY HINGE PLATE ASSEMBLY WILL BE INCLUDED IN THE PAY ITEM "STRUCTURAL STEEL SIGN SUPPORTS." THE COST OF FURNISHING AND INSTALLING THE BREAKAWAY COUPLING SYSTEM, CONSISTING OF BRACKET, BREAKAWAY COUPLINGS, SPECIAL BOLTS, AND SHIMS WILL BE INCLUDED IN THE PAY ITEM "SIDE MOUNTED SIGN FOUNDATION." THE COST OF FURNISHING AND INSTALLING FOUNDATIONS, INCLUDING EXCAVATING, CLASS "A" CONCRETE, REINFORCING STEEL AND ANCHOR FERRULES, WILL BE INCLUDED IN THE PAY ITEM "SIDE MOUNTED SIGN FOUNDATION."

TABLE 1 - HINGE BOLTS

POST SIZE	HINGE ASSEMBLY		THREAD DESIGNATION (U.S. CUSTOMARY UNITS)
	BOLT DIAMETER	BOLT LENGTH	
W6 x 9	1/2	1 1/2	13 UNC
ALL OTHERS	3/4	2 1/4	10 UNC

REV.	DATE	REVISION DESCRIPTION	SHEET NO.
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.

Plotted Date: 4/28/2014

DESIGNER/DRAFTER: BKC
CHECKED BY: JRH
SCALE AS NOTED

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: ...\SB_Breakaway_Signpost_BSM6_HingeDet.dgn

SIGNATURE/BLOCK:
DESIGNED BY:
LUCHS CONSULTING ENGINEERS, LLC
89 COLONY STREET
MERIDEN, CT 06451

PROJECT TITLE:
ROUTE 8
INTERCHANGE 18
NEW NORTHBOUND ON-RAMP

TOWN: ANSONIA AND DERBY
PROJECT NO. 36-179
DRAWING NO. BSM-6
DRAWING TITLE: BREAKAWAY SIGN SUPPORTS HINGE DETAILS
SHEET NO. 05.41